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Telephony

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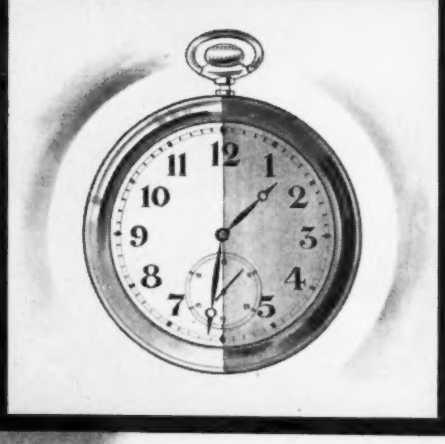

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FLASHES AND PLUGS

A BREATHER. Mistress: "Ella, when you were hired, you told me one reason you were such a good maid was that you never got tired. But this is the third afternoon I have come into the kitchen and found you asleep."

Maid: "Sure, ma'am. That's how I keep from gettin' tired."

•

TV AND CONVERSATIONS. Telephone men know, but the general public isn't aware that Jackie Gleason or Perry Como on TV have anything to do with a long distance telephone call to one's relatives. A report of a survey conducted by Pacific Telephone & Telegraph Co. observers disclosed that night business has a rise and fall like the ocean.

A fast, hard-slugging boxing match is only one of a number of sporting events that can bring about a dip in traffic—followed by a crest of deferred calls when the battle ends, they report.

Being familiar with the nightly pattern over a long period of time, long distance operators are quickly aware of outside "competition," such as a presidential speech on television or radio—one of the things which always causes a measurable lag in telephone traffic.

Any graph of long distance telephone calls on Monday through Friday evenings would show increased calling at half-hour intervals as calls begin coming through from TV viewers who have waited for their favorite program to end or who are taking advantage of the break between programs, it was observed.

•

CHRISTMAS LABELS. A wise mother compelled to take her four-year-old along on a Christmas shopping tour through New York's large department stores, pinned to the child's coat a sign that said: "My name is Mary Rose Blank, 1522 Blank Road, Parkchester 62, The Bronx, N. Y."

The card bore her father's name and gave his office telephone number.

The idea seemed so sensible, a floorwalker, aware that many children are separated from their mothers in the rush, suggested to the management that printed identification forms, with safety pins, be distributed to mothers shopping with children.

•

RIDING HERD ON A FLATIRON. Fire fighters in Turners Falls, Mass., on Nov. 30 were called to a second-floor apartment to retrieve a wandering flatiron and, incidentally to douse a small fire.

The housewife, who lives on the third floor, went out and left the iron turned on, it seems. The iron burned through an ironing board, fell to the floor, burned through the floor and dropped in on the tenant below.

Luckily, the fall broke the connection.

CIRCULATION

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Since 1901

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IN THE NATION'S CAPITAL

BY FRANCIS X. WELCH, WASHINGTON EDITOR

Public relations people should study substitutes for private enterprise words which have been distorted. British post office explains need for rate increase for government-owned telephone system. Rate case developments of interest to telephone industry reviewed.

ONE OF THE THINGS which sound public relations practice is supposed to do for public utility management people is to emphasize the importance of people. Management is not concerned with things, as such. You cannot manage a telephone switchboard. You cannot manage an outside line system. You cannot manage a radio relay installation. What you really manage is the people who operate these various apparatus and property.

Management's only real control is through the people who take care of the property. Management can only manage *people!* And this principle goes further than employe management. The importance of managing people becomes even more obvious when applied to customers and investors. After all, it is people who are the source of the money which the telephone company takes in from its subscribers. It is people who must be persuaded to invest capital in the business, in ever increasing quantities, and to keep it invested.

Good public relations is the art, therefore, of dealing with people as distinguished from things — plant, equipment, etc. And, in dealing with people, nothing is more important than accurate communication of ideas. Perfectly good words have an unhappy faculty of falling into disrepute or disgrace. When this happens, it is not good public relations to use them in such a way that popular distortions are continued or aggravated to the detriment of a company's interest.

"Capitalism" and "monopoly" and "propaganda" are three ready examples of perfectly good words which have become dirty words, smear words, red pepper words. This has happened by calculated distortions of people who have axes of their own to grind. It is the Communists, for example, who have taken a perfectly good word, such as "Capitalism," and repeated it in such a foul sense for so long a time that smart business management is instinctively beginning to avoid it. It is no longer a sound avenue of accurate communication when you are dealing with the public. They get the wrong idea.

Misled by heavy-handed cartoons and diatribes in leftish and more radical labor press, they get a vision of a Capitalist as a mustached villain with a high silk hat and a two-pound gold watch chain draped across a pot belly, smoking a $2.00 cigar, with one foot on a ragged widow, blowing smoke in an orphan's face.

All this is by way of referring to some interesting views recently expressed by some good friends of private enterprise on the further use of this word. Robert A. Whitney, president of the National Sales Executives Association, said in a recent issue of *Advertising Age* that the trouble with our economy is that the people, who have it, do not like the name history has given to it. In Europe, particularly, he says, "Capitalism is a dirty word," and people just won't buy it. In fact, Mr. Whitney goes so far as to suggest that "Capitalism is dead"—as a name that is—and that it should be replaced with a new term, "consumerism." He says, "The consumer is king in our economy —not capital. Everything is done to interest the consumer. The standard of living of the country is measured by what the consumer has, not by how much we produce."

Taking a different approach, but with the same end in mind, was Theodore S. Repplier, president of The Advertising Council. He agrees that Capitalism needs better public relations and a new label. But he would reject the naughty word in favor of "People's Capitalism." The long-suffering American taxpayer, he feels, would never consent to underwriting a world-wide propaganda effort to popularize such an unusual word as "Consumerism."

Thus, the experts seem to disagree on the remedy while agreeing on the diagnosis. But, while something apparently needs to be done to rescue the real meaning of Capitalism, don't we have a similar threat, along the same front of distorted meanings, in the word "automation"? This is a word which is likely to appear more and more frequently in telephone business discussions, especially of an economic nature. Those who know the true meaning realize that it is a neatly coined word designed to describe the effect of certain highly specialized machinery which will, in turn, control technical production previously performed by human labor. But, already the word is being kicked around in debatable context so as to call up a very different picture indeed. The picture which it calls up is that of a cold-blooded, push-button robot, tramping ruthlessly over the bodies of workers displaced from their jobs. Even the sound of the word has a Frankenstein ring to it.

Incidentally, this writer is attempting—what is probably a lost cause—to substitute the phrase "service area responsibility" instead of "monopoly," as that word is usually applied, in a derisive fashion, by critics of the telephone industry and other public utility companies.

Another phrase which needs some inspection, if not change, is the frequent use of the words "private utility company" as distinguished from a publicly owned utility company or cooperative. "Commercial utility company" is not quite the answer. "Business-managed utility company" is a bit awkward. "Tax-paying utility company" is a bit loaded. Maybe a prize contest is indicated.

There is no such thing, when you get right down to it, as a "private utility company." Such a company is not private at all. It has a *public* service obligation, just as much as any municipal plant or cooperative. Indeed, the company is even more "public" in the sense that it is subject to public regulation, by a government commission—from which these other public agencies are generally exempt. Furthermore, a business-managed utility company is more free and democratic in that it is owned by people who have voluntarily invested in the enterprise, as compared with some publicly owned, tax-exempt utility agency which is being operated (often at a deficit) on the basis of involuntary investment of taxpayers' funds — generally without their consent and often without their knowledge.

To repeat, all of these words—monopoly, propaganda, Capitalism, automation, private company—all were once honest expressions of clear meaning. They have become contaminated by abuse. It is too bad these casualties have to happen to perfectly good words. But smart public relations would seem to suggest that when such a casualty does happen, the word had better be sacrificed and something else substituted instead of dragging it around long after it has begun to smell bad.

British Rate Increases

The Oct. 29 issue of *The (London) Economist* gives us an interesting analysis of the recent rate increases proposed by the British budget (passed by Parliament for government-operated telephone service of the British Post Office). The increase amounts to 19,000,000 pounds (53.2 million dollars). *The Economist* goes on to point out that the telephone account was "on the road to insolvency." Normal "straight-line depreciation" (such as required by many public service commissions in the United States for public utilities under their control), plus the extra sums ploughed back, were producing a deficit of 12,000,000 pounds (35 million dollars) a year to replace equipment at current cost.

The greater the demand for telephones, the greater the prospective deficit by the very reason that the telephone was cheap and the demand for it was insatiable. The postoffice had hit on a very fine slogan: "A telephone in every home." But the *Economist* remarked that "A telephone at a loss in every home is another matter."

Eventually the postoffice used this occasion to put its telephone department on a full replacement basis as far as depreciation is concerned. This means deducting from current expenses the full cost of current replacements at current prices. *The Economist* explained what happened as follows:

"Wisely the postmaster general has discarded all half measures and moved to a full replacement basis. He has also had to provide for the substantial increases in wages estimated to amount to £14 million (39.2 million dollars) between 1954-5 and 1956-7 and for a rise of £3 million (8.4 million dollars) in other costs. Fortunately, technical progress and managerial progress make it possible to absorb part of the extra cost.

"Finally, this is the moment chosen—and a good one—to come to terms with the Chancellor of the Exchequer. The postoffice is not an autonomous tax-paying body like the more recently nationalized industries. It is a government department engaged in trading. It pays neither income tax, profits tax, nor even vehicle duty, but its profits accrue to the treasury, and though profit is not the object, it is understandable that the treasury should demand some contribution in lieu of the substantial tax exemptions that the postoffice enjoys. From the Postmaster General's point of view it is equally wise to make a long term bargain with the treasury. He has been able to settle on a five-year basis at £5 million (14 million dollars) a year—a figure that happens to be less than half the £10¾ million (30.1 million dollars) that the postoffice contributed annually to the Exchequer under the prewar . . . plan. The department must also budget for a reasonable margin of safety. It has been decided to aim at a surplus of £5 million (14 million dollars) a year in place of the prospective deficit of £3 million (8.4 million dollars). The margin is small in a turnover of over £300 million (840 million dollars). The figure of nearly £26 million (72.8 million dollars) to be found can be expressed as a simple sum:

Additional Income to Be Provided from Telephones:		
Rentals	£9,750,000	$27,300,000
Local calls...	7,000,000	19,600,000
Other charges	2,250,000	6,300,000
Telegraphs:		
Ship-shore ..	100,000	280,000
Posts:		
Inland services ...	5,700,000	15,960,000
Foreign parcels	1,100,000	3,080,000
Total ...	£25,900,000	$72,520,000

Telephone Paging Service

The Bell Telephone Co. of Pennsylvania may be the first commercial telephone company to install a commercial paging service. Hearings were held in late November before the Federal Communications Commission on the company's plans to inaugurate a pocket-type radio-telephone paging service in the Allentown and Bethlehem areas. There was testimony to the effect that the service would cost about $16 for 100 calls a month. This estimated cost figure would include $5.00 monthly rental on a pocket-size receiver and a $5.00 monthly service charge, plus call unit charges normally amounting to 10 cents per call when completed within the community in which the transmitter is located.

Bell System representatives explained that the telephone company would operate a transmitting station which would send out signals to doctors and other "subscribers" walking or driving around the service area. These signals would actuate a tone in the receiver carried by the individual subscriber. He would then know that he should call a predetermined place or party. There was a protest from a commercial radio paging service, already operating in the Allentown-Reading-Harrisburg areas, on a somewhat different basis.

Rate Case Developments

The U. S. Supreme Court late last month decided not to review an interesting transit fare rate decision coming up from the District of Columbia. It is interesting because it leaves standing a decision of the U. S. Circuit Court of Appeals for the District of Columbia, which virtually instructs the District of Columbia regulatory commission to use a current value rate base instead of original cost—or else give a good reason why the original cost method should be used. The catch in this case, of course, is that the current value would probably be *less* than the original cost. But the general principle is certainly an important ruling to be left standing in such a high federal court.

The case, which is styled George Spiegel *v.* Capital Transit Co., came up with a routine fare rate increase demand by the company which, several years ago, was taken over by the controversial Louis Wolfson financial interests. The District of Columbia commission allowed the fare rate increase, or the best part of it. But, in its opinion, it pointed out that the market value of the securities (at which the Wolfson interests had acquired control of the company stock) was only a small fraction of the book value or original cost.

Nevertheless, after giving all kinds

of reasons why a current value basis would not be preferable, the District commission continued to follow its traditional adherence to original cost, and, as already stated, in this case it amounted to a great deal more than what a current valuation might amount to—especially if recognition were given to market value of securities (which would be a most unusual approach).

Anyway, the court of appeals failed to understand why the commission reasoned one way and decided another. The court reversed the fare increase and sent the case back with strong language about reconciling what the commission had to say with what the commission had done. The commission took an appeal, and the United States Supreme Court refused to review. There the matter stands. The interesting part will come when the commission takes another look, at which time it will probably give some thought to the advice from the higher court about recognizing current value.

Out in Montana a lower state court has again upheld the decision of the Montana Public Service Commission (previously handed down in 1953) granting higher telephone rates to the Mountain States Telephone & Telegraph Co. This marks the second time the Montana district court has turned down the attempt of Attorney General Olsen to upset the commission's rate increase, estimated at about $910,000 a year.

On a previous appeal test, however, Olsen was victorious in the Montana Supreme Court on a question of technical procedure involving his rights to take the appeal. But this time on the merits, the district court has held that the commission's action was proper and that the rate increase, was "lawful, reasonable, and just." A further appeal to the state supreme court will probably be necessary before the long-drawn out case is finished.

Down in Texas, an unusual rate case, involving a railroad company, has been directed to the attention of this writer. Our old friend, Jack Haley, secretary of the Texas Telephone Association, sent this department a brief by the Texas Telephone Association in a case before the Texas Supreme Court in which the Texas & New Orleans Railroad Co. was trying to upset a freight rate order of the Texas Railroad Commission.

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REA Makes Telephone Loans in Four States

New loans by the REA amounting to $1,554,000 will enable four telephone systems in Wisconsin, South Carolina, Washington and Michigan to improve and extend service for farm families and other rural residents. Details of the new loans are announced by the U. S. Department of Agriculture as follows:

Nelson Telephone Cooperative, Durand, Wis., on Nov. 17 was allocated a loan of $524,000, first loan. The new borrower plans a modern telephone system to serve 1,285 subscribers in Buffalo, Dunn, Pepin and Pierce counties.

As a first step in its expansion, the cooperative proposes to acquire, rehabilitate and integrate the Home Telephone Co. and the Inter-County Telephone Co. These companies, both located in Durand, together with the Nelson Telephone Cooperative, are now furnishing magneto service to 1,099 subscribers over 180 miles of line.

The proposed new system will consist of two new automatic exchanges, one at Nelson and the other at Durand, and 237 miles of line. This will include 68 miles of new line construction. The co-op will rebuild 164 miles of the existing line; 5 miles of existing line will be used in place. Under present plans, the subscribers will be able to call between the two exchange areas without toll charge.

William Weisenbeck is president of the Nelson cooperative.

*

Home Telephone Co., Inc., Moncks Corner, S. C., on Nov. 21 was extended a loan of $460,000, first loan, to improve and extend rural telephone service in Berkeley County.

The borrower, a commercial corporation, plans to furnish dial service to 515 subscribers in the community now without telephones. New facilities will include 182 miles of line and an additional automatic central office at Jamestown.

The Home company now provides dial service to 685 subscribers over 108 miles of line. The present dial facilities at Moncks Corner as well as 99 miles of the existing line will be retained and used in place in the enlarged system. According to present plans, subscribers will be able to call between the Jamestown and the Moncks Corner exchange areas without toll charge. Part of the loan funds will be used to refinance existing indebtedness. When complete, the expanded system will consist of 290 miles of line.

S. Helmly is president and manager of the Home company.

*

Farmers Mutual Telephone Co., Lynden, Wash., on Nov. 23 was allocated a loan of $170,000, third loan. This loan, together with two others, makes a total of $1,882,000 in REA loan funds which the borrower will use to provide modern dial service for 7,383 subscribers in Whatcom County. The system, when complete, will consist of 762 miles of line and 10 automatic central offices. Four of the offices are now in operation.

W. B. Vander Griend is president and Milton Larson is manager of the Farmers Mutual company.

*

Southern Telephone Co., Brooklyn, Mich., on Nov. 25 was extended a loan of $400,000, first loan, to improve and extend rural telephone service in Hillsdale, Jackson and Lenawee counties.

The new borrower, a commercial company, proposes to use the loan funds to provide a modern telephone system in southeastern Michigan to serve 1,264 rural subscribers, including 559 families now without telephones.

The company now provides magneto service to 705 rural subscribers through the Brooklyn and Cement City central offices. Present plans include a new automatic office building at Brooklyn to replace the two existing central offices, and 90 miles of new line. About 34 miles of the existing line will be rebuilt, 22 miles used in place, and the remainder retired.

Wade F. Lora is president and Glenn Watterson is manager of the Southern company.

Here are the principle items of equipment used by the central office people in the event of a toll cable failure. The larger box is a combined tone and buzzer set. The smaller is the "subset" used with the operator's telephone set.

Toll Cable Restoration

By *HAROLD B. McKAY*

Bell company finds temporary repairs of failures in high-usage toll cables justified to save huge losses of revenue. Circuits restored on priority, depending on importance.

WHEN ANY cable fails, the simplest thing to do is to locate the trouble, then repair the cable in a permanent manner. However, the revenue losses incurred when a high-usage toll cable fails may be great enough to justify certain temporary repair measures, even though this means doing the job over again later in a permanent manner.

The Pacific Telephone & Telegraph Co. recently computed that the failure of one of its cables running south from San Francisco could mean a loss of revenue of about $38,000 per hour. These cables, in addition to regular toll service, carry circuits on which guarantees have been made to the users, and certain high-priority signal loops such as the air raid warning facilities.

These cables are subject to total outage from such varied hazards as bulldozers pulling up the underground sections, automobile wrecks pulling the poles from under the aerial sections, and even landslides caused by the San Andreas earthquake fault.

Because of the varying importance of the different circuits in a toll cable, a plan of restoration by priority appeared to be more desirable than a routine repair which would restore pairs without regard to their importance. Accordingly, the Pacific T&T company has worked out a plan for such priority restoration which has already met the test of an actual total cable failure.

Cable failures, like childbirth, seem to have a preference for the middle of the night. During such hours, cable department personnel are not ordinarily on duty; so they must be called out. The restoration plan, therefore, contemplates the use of regular testboardmen or central office employes for the job of identifying priority circuits, rather than awaiting the arrival of a cable tester.

Each office, which has access to a toll cable, has been furnished with a kit of emergency test equipment. This equipment was chosen for its simplicity of operation. It consists of a tone source, a buzzer, and talking sets. The latter are equivalent to sub-sets equipped with operator's headsets. They can supply battery to distant points as well as to their own transmitters.

Priority Lists

The secret of the success of the cable restoration plan is the preparation in advance of complete priority lists of all toll cables, by cable sections, that is, possible breakdown or testing points. These lists are kept in a book in each office. They contain a record of the

circuits in each toll cable in order of the priority in which they are to be restored. These sheets are maintained by the trunk assignment personnel; and if a change is required at any time, the list is re-issued—no penciled notations or corrections are permitted. Thus the offices at each end of the cable always have identical sheets.

The lists are in pages of 10 pairs—called tagboard lists. The "tagboard" refers to the perforated cloth strips used by splicers to identify cable pairs. Part of the emergency restoration plan includes the advance preparation of lengths of cable of various sizes. These cables have all of their pairs brought through the numbered holes in the cloth tagboards so that all pairs can be identified by tagboard number and hole.

Such lengths of emergency cable are used as jumpers. That is, they are used to bridge around the break. The ends of a severed cable usually will not meet again anyway, and in some cases a substantial length of the cable may be destroyed. Lengths up to 200 feet of cable and up to 200 pairs are kept with pairs tagged, ready for emergency.

In actual practice, when a cable fails, the splicing crews go to the scene of the break which is determined by the usual methods. While they are enroute, a central office man or toll testboardman connects the tone set to a pair in the bad cable. This pair has been determined in advance and is automatically pair number one on the priority of restoration. It may be any pair in the cable; the important thing is that it be marked on the priority list so that the central office men will know exactly which pair to use.

Tone Set

The tone set is combined with a buzzer circuit which causes a signal to sound when the splicer grounds the pair. Thus, when the splicer reaches the fault and probes for the tone, he can signal the central office man as soon as he finds it.

In the meantime, the central office man performs other chores incident to the failure, such as removing heat coils or fuses on pairs assigned to carrier systems or other circuits where this may be necessary. Also, a preassigned telephone number in the office is cross connected to a pair which is identified on the priority list as the field supervisor's telephone.

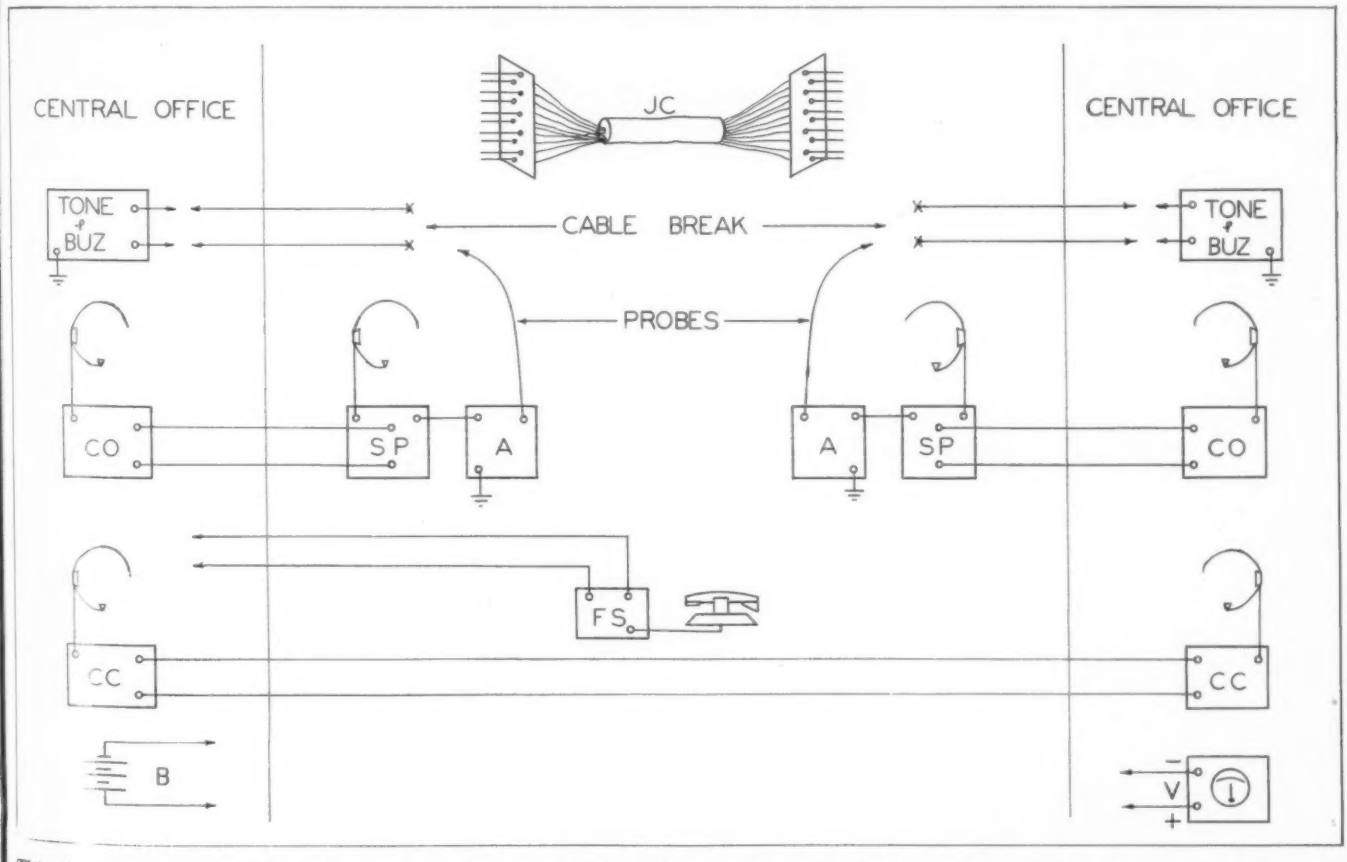
When the splicer finds the tone and grounds the pair, the central office man picks up the operator's headset and connects to this pair. The splicer connects his headset to the pair also. A second splicer, or helper, does the same thing with the other end of the severed cable, and establishes a talking connection with the central office man in the other office.

The second pair to be identified under the priority plan will be spliced through and become the first talking pair re-established between the two offices. This will be used by two additional men, one in each central office who will serve as "continuity checkers." As each pair is made good, these men will test it by placing a 22½-volt battery at one end and a voltmeter at the other end. The meter used is a zero center instrument which quickly shows up a reversed pair by its movement in the wrong direction.

Reverses found this way are corrected by the use of a reversing shoe rather than delay the splicer by having him go back over his work.

The third pair to be restored will be the pair assigned to the field supervisor. This gives the foreman at the scene of the damage a telephone with

(Please turn to page 34)



This shows the emergency equipment used in a toll cable failure. When cable fails, each central office connects tone to a preselected cable pair. Splicer finds this tone with the probe, through amplifier (A) and headset assembly (SP). He signals central office man by means of buzzer. Talking is arranged by means of headset (CO). Tone is then moved to another pair. Jumper cable (JC) is a prepared length of cable, the pairs in which have previously been brought out and identified on tag-boards. This jumper is used to bridge across the break. Other items are: field supervisor's telephone (FS); continuity checking telephones (CC); voltmeter (V) and 22½-volt battery (B). (Drawing by Victor Willard)

Commission Rulings on

Rapid Tax Depreciation

By WILLARD F. STANLEY

SOME 15 MONTHS have elapsed since Section 167 of the Internal Revenue Code became effective, providing for rapid tax depreciation on the "declining-balance" and "sum-of-the-digit" methods. Regulated utilities on a calendar year tax basis could, by obtaining extensions of time for filing their returns, defer until Sept. 15, 1955 their first decision whether to adopt one of the rapid methods with respect to new property additions made in 1954. The last mentioned date was the final deadline for this purpose, since further extensions were prohibited by law.

Many utilities have been awaiting the decision of their local state commissions, (and, in the case of some electric and gas companies, the Federal Power Commission) as to the accounting and rate-making treatment to be followed with respect to this new technique, before deciding whether to adopt a rapid method of tax depreciation. While statistics are lacking, it seems probable that some companies in this group did not elect to adopt a rapid method as to their 1954 depreciable additions, thereby becoming foreclosed from so doing in the future. No doubt a considerable number of utilities, whose state commissions have not yet taken a position in the matter, are still deferring their decision, as to 1955 and subsequent years.

By now it has become pretty generally known that rapid tax depreciation applies, at the election of the taxpayer, to any and all properties (or portions thereof) constructed (or acquired new) on or after January 1, 1954; also that taxpayers have the right to change their elections each year as to that year's new additions.

Thus, a utility which failed to adopt a rapid method for 1954 additions, could still elect any rapid method desired in its 1955 calendar year tax return as to the additions made in that year. Then, it could fail to make such an election for its 1956 additions, and again elect rapid treatment the following year, and so on.

Furthermore, taxpayers may adopt a rapid method for one year's additions as to one or more classes of property and, as to next year's additions elect rapid depreciation only for specific items in such class or classes, and vice versa; or it could, in one year, apply a rapid method for all property and next year reduce its election to cover only certain classes or items of property, or the reverse.

While the rapid tax depreciation methods have come to be better understood with the passing of time, the accounting and rate treatment of this technique has not yet been fixed by regulatory commissions in most of the states. But, an up to date survey indicates that enough commission action has now occurred to show how the matter is trending and to make useful a summary of what has taken place.

Accelerated Amortization— First Cousin

Where commissions have acted as to rapid depreciation, we find that in every instance such action has been similar to that taken by these commissions in the past with respect to treatment of accelerated amortization of emergency facilities under the Revenue Act of 1950. A brief comparison of accelerated amortization and rapid depreciation seems desirable at this point, for a better understanding of why the commissions have adopted the same treatment in the case of both these techniques.

There is a definite kinship between the two, in that, fundamentally, they both provide for higher deductions from income tax purposes in the early years of the life of new property, followed by lower deductions (or no deductions) in the latter portion of the life of such property. But, while springing from the same family stock, there is considerable difference in the degree of the tax deferral which each provides for.

For example, accelerated amortization provides for a uniform write-off of 20 per cent per annum of the entire cost of the certified portion of the emergency facility, thus writing off the facilities completely within five years. In the case of rapid depreciation the deductions extend over the entire life expectancy of the new property, but are substantially larger in the earlier years.

With a property having a seven-year life, rapid depreciation (using the declining balance method) would write off about 80 per cent of cost during the first five years; with 10-year life, the first five years would comprise an aggregate write-off of about 67 per cent. With longer-lived property the percentage of write-off within the first five years would tend to decline; for example with a 30-year life, only about 45 per cent of cost would be written off in the five year span. In each case, this compares with 100 per cent write-off in five years as to accelerated amortization. With long-lived property, such as that of utilities, the write-off under accelerated amortization is much more rapid than under rapid depreciation.

The following comparison reflects some of the other principal differences between the two techniques:

	Accelerated Amortization	*Rapid Depreciation*
Duration	Intended to be temporary (limited to period of national emergency)	Intended to be permanent; part of the fundamental tax law.
Basic Purpose	To meet an emergency by stimulating production of facilities for national defense.	To stimulate, permanently and continuously, expansion and modernization of plant and property.
Rate of Depreciation Permitted	A purely arbitrary rate of 20 per cent per annum, entirely unrelated to normal rates previously allowed for like property.	A rate, in the early years of the life of new property about equal to twice the previously allowed normal rate — such rates gradually decreasing over the life of the property.
New Property Affected	Only such as is certified by the proper federal authorities as being necessary for the defense effort.	All new property to the extent constructed (or acquired new) on or after Jan. 1, 1954.
Taxpayers Affected	A relatively small number of taxpayers, principally among larger corporations.	Every taxpayer constructing or acquiring new, on or after Jan. 1, 1954, depreciable property with a life span of three years or more.

But the principal difference between the two techniques, is the much greater period over which federal income taxes are deferred under rapid depreciation, particularly in the case of utilities, with long-lived property. This results in substantially longer recurrence of the higher annual deductions for depreciation for income tax purposes and consequently of reduced annual taxes.

Accounting Institute Bulletins

This difference in the two techniques was recognized by the American Institute of Accountants in its Bulletin No. 44, covering the accounting treatment of rapid depreciation. The previous bulletin, No. 43, with respect to accounting treatment in the case of accelerated amortization, required that, where the amounts of the annual tax reductions are material, income should be equalized by charging thereto an amount equal to such reduction, as a provision for deferred taxes, to be credited to a reserve for future tax liability.

However, Bulletin No. 44 (rapid depreciation) provides that such a provision for deferred taxes, and the reserve created thereby, are required only (1) where the amount of the annual tax reduction is material, and (2) where it is reasonable to expect the tax deferral will be only for a few years.

This portion of the bulletin was preceded by the phrase "in the ordinary situation" and some have contended that this made the above described treatment inapplicable to regulated utilities. Naturally, as to both accelerated amortization and rapid depreciation the provision for deferred taxes and consequent reserve, would apply only in cases where the corporation deducted depreciation on its books at the straight line or other customary rate, but deducted greater depreciation for tax purposes.

This last described procedure is believed to be followed by all utilities, both as to accelerated amortization and rapid depreciation, and all federal and state commission action to date, as to either technique, has uniformly provided or implied that book depreciation should continue to be taken on the normal basis previously used.

"Deferral" or "Saving?"

Practically every state commission acting in the matter of the accounting or rate treatment of accelerated amortization followed the principle that the tax reduction represented merely a "deferral" and not a "saving," and that consequently income should be equalized in the early years of lower taxes by a charge thereto as a provision for deferred taxes, crediting such amount either to a reserve for future tax liability or to a special restricted surplus, unavailable for dividends. Then, in later years, the higher taxes due to the lower deductions for tax depreciation (or cessation thereof in the case of accelerated amortization) would be provided for by drawing on such reserve or surplus. The Federal Power Commission adopted substantially the same principle.

The question before the commissions as to rapid depreciation is, therefore, whether that technique, too, involves a "deferral" of taxes, or whether, because of the longer periods of recurrence of the higher depreciation rates, considered in connection with the anticipated continuous expansion of regulated utilities from year to year over a considerable future period, the tax reduction should properly be considered as more in the nature of a tax "saving." If it is a "saving," then no provision need be made to "equalize" income or to create a reserve to take care of higher taxes in subsequent years.

What Commissions Have Done

The author's information indicates that 22 state commissions acted in the matter of accelerated amortization. Best information to date is that 12 state commissions have taken action in the matter of the accounting treatment of rapid depreciation. *All of the latter 12 were included among the 22 acting on accelerated amortization, and each of these 12 took the same position as to rapid depreciation as they had as to accelerated amortization.*

There is shown on page 26 a tabulation of the action taken to date by federal and state commissions with respect to accounting and rate-making treatment by utilities of accelerated amortization and rapid depreciation. In most instances the orders were issued in response to the application of a particular utility, but in a few cases they were general orders. Except in special instances, however, there seems little doubt that the positions taken as to particular companies would apply to all utilities in the respective jurisdictions.

All 12 state commissions acting on rapid depreciation up to date have adopted the "deferral" theory, with a provision for deferred taxes, charged to income and credited either to a reserve or to special surplus.

The Florida commission first issued an accounting bulletin, in May, 1955, in which the tax reductions were to be treated as "savings," with no special accounting provisions except earmarking of the increases in income and surplus from this source by footnotes on the financial statements. Subsequently, in connection with a request for instructions filed by two companies, the commission issued an order in which the subject was discussed and the conclusion reached that a "deferral" accounting treatment should apply, with a charge to income as a provision for deferred taxes, and a credit to restricted surplus. Simultaneously the bulletin was rescinded.

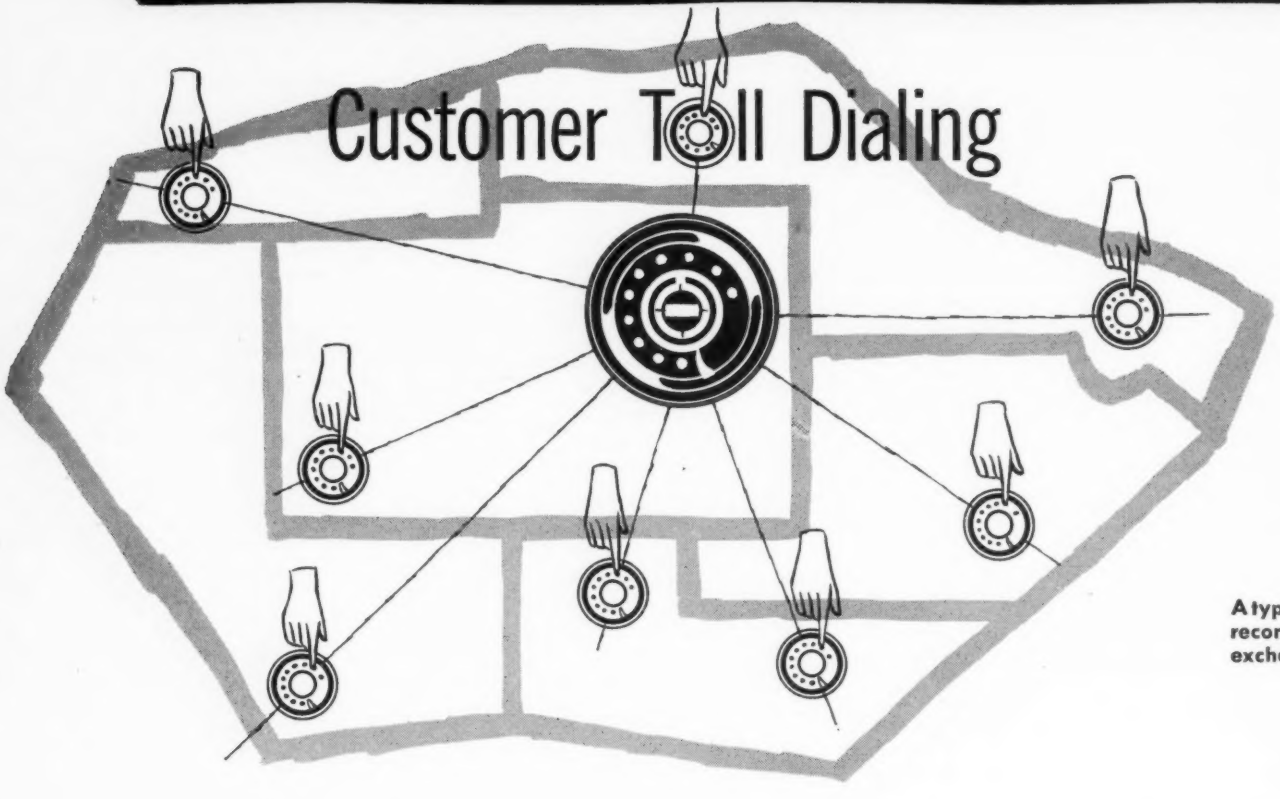
"Reserve" or "Restricted Surplus?"

Although in agreement as to the fundamental principle of "deferral," and consequently as to the need for a provision for deferred taxes, to be charged to income, the 12 commissions acting on rapid depreciation have differed as to the account to which such provision for future taxes should be

(Please turn to page 26)

NETWORK...OR NATIONWIDE

Customer Toll Dialing



A typical bank
recorders in
exchange.

The new North AuTollizer automatic toll ticketing system enables any telephone company to:

Prepare its system for participation in Direct Distance Dialing on a self-sufficient basis.

Handle network "short haul" toll calls on a profitable basis.

Handle all station-to-station toll calls on a speedier and more efficient basis, with fewer personnel problems.

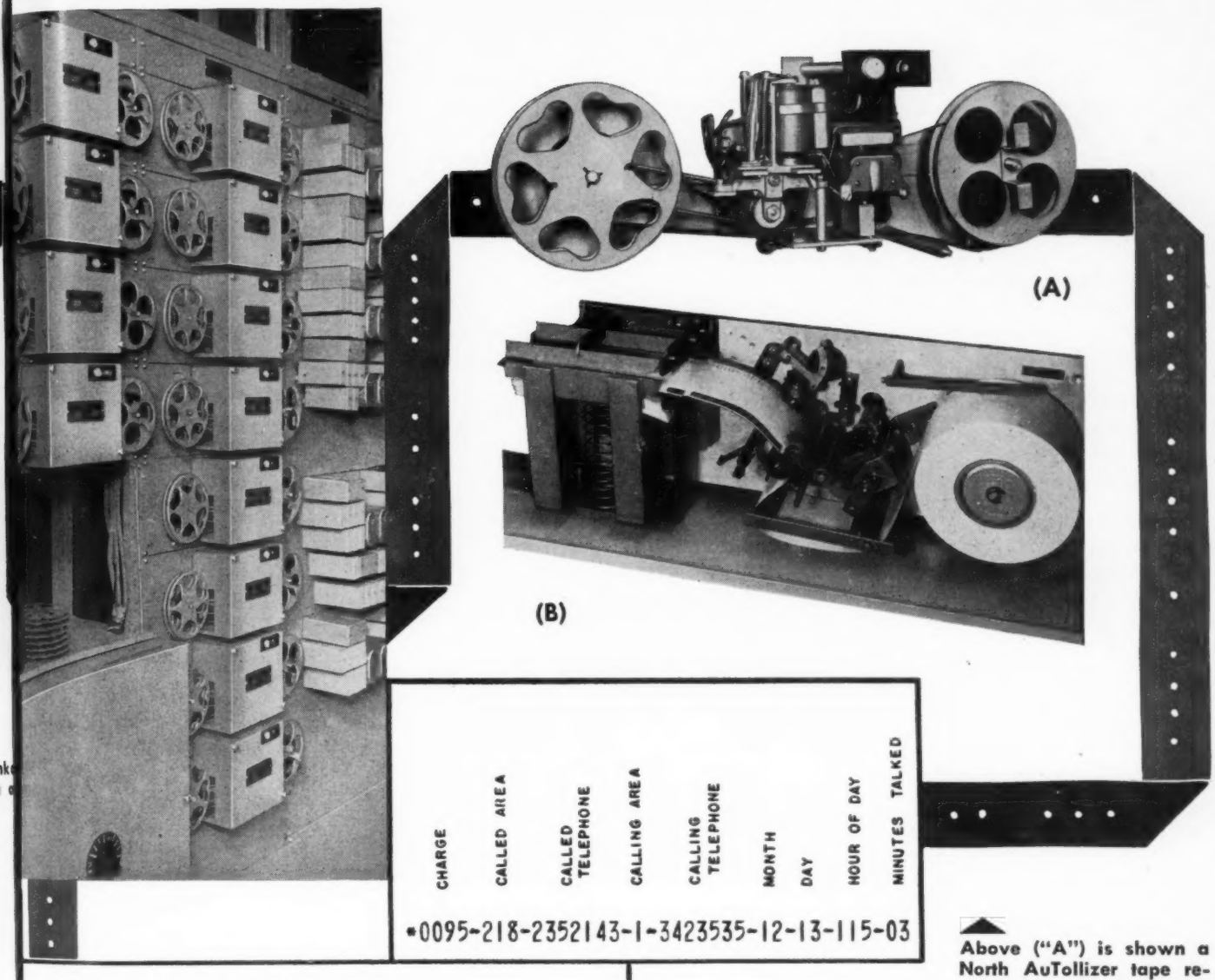
An important new AuTollizer feature is the provision for automatic identification of the calling station. No operator supervision is required. The customer does not dial his own directory number. Every toll call is automatically routed, regardless of the number of offices involved. Alternate routes are selected by the equipment if the first choice trunk is busy.

The equipment prints complete billing information on toll tickets. Alternatively it can be connected to any standard card-punching machine to provide for automatic billing.

For more details regarding AuTollizer operation

ASK FOR BULLETIN AT-558

NORTH



CHARGE | CALLED AREA | CALLED TELEPHONE | CALLING AREA | CALLING TELEPHONE | MONTH | DAY | HOUR OF DAY | MINUTES TALKED

•0095-218-2352143-1-3423535-12-13-115-03

Automatic Identification
- Automatic Routing
- Alternate Route Selection
- Automatic Ticketing

This is a sample ticket for a distant toll call. Note that the national area code is included. This information is "read" from the recorded tape and analyzed by the computing unit.

Above ("A") is shown a North AuTollizer tape recorder. It punches all information regarding toll calls into inexpensive paper tape.

("B") This is the Teletype printer. Actuated by an AuTollizer computing unit, it produces tickets bearing complete billing information.

NORTH AuTollizer® System

Available in Canada through ERICSSON TELEPHONE SALES of CANADA, Ltd. 1410 Stanley Street Montreal 2, P.Q.

NORTH ELECTRIC COMPANY

601 South Market Street, Galion, Ohio

credited. The tabulation indicates that 7 commissions have provided the credit be made to a reserve account (bearing various designations), while 5 commissions have favored crediting some form of restricted surplus account.

Credit of the income charge to a restricted surplus account rather than to a special tax reserve is believed to be favored by most utilities, since, by this procedure, the surplus (even though restricted) would fall technically into the category of common stock equity, as a part of total capitalization. Credit to a reserve would represent provision for potential liability outside the capital structure.

Back in the earlier days of accelerated amortization, when similar alternative credits to reserves or surplus were being discussed, a poll of some of the leading security analysts seemed to indicate, if the author's memory is reliable, that they would probably include the accumulated tax deferrals in common stock equity, in making their calculations, if these amounts were held in any account designated "surplus" even though called "appropriated" or "restricted," but would be likely to exclude such amounts from common stock equity if carried in any

(Please turn to page 35)

Tabulation of Action of Regulatory Commissions with Respect to Treatment of Accelerated Amortization and Rapid Depreciation for Accounting and Rate-making Purposes

Action of the commissions is indicated by "X" in appropriate column. Where no symbol follows the "X," the action was for accounting purposes only, without expressly indicating treatment for rate-making.

	ACCELERATED AMORTIZATION		*RAPID DEPRECIATION*		
			Deferral[1]		*Savings*[2]
Federal or State Commission	*Deferral*[1], [10]	*Savings*[2]	*Credit to Reserve*[3]	*Credit to Surplus*[4]	
Federal Power	X[5]				
Alabama	X			X	
California	X[7]				
Colorado	X				
Connecticut	X				
Florida	X		X		
Georgia	X[8]		X		
Idaho	X				
Indiana	X[7]			X	
Illinois	X		X		
Kansas	X				
Kentucky	X			X	
Louisiana	X[5]		X		
Maine	X		X		
Massachusetts	X				
Michigan	X		X		
Missouri	X[5]				
New Hampshire	X[5]				
New Jersey	X[7]				
New Mexico	X				
North Carolina	X				
Ohio	X		X		
Oregon[9]	X				
Virginia	X			X	
West Virginia	X			X	
Washington		X[6]			

(1) "Deferral" treatment means income is normalized by charge thereto of an amount equal to the reduction in taxes, as a provision for deferred taxes, credited either to a reserve or surplus account.

(2) "Savings" treatment means income is increased by tax reduction, with no offsetting charge.

(3) Usually designated "Reserve for Deferred Tax Liability" or by some other similar appellation.

(4) Usually designated "Restricted" or "Appropriated" surplus, and is not available for dividends. Such reserve or surplus accumulation is subsequently charged with the excess taxes payable in later years when depreciation deductions are smaller because of adoption of an accelerated amortization or rapid depreciation. Theoretically, the accumulated reserve or surplus account will disappear with the end of the life expectancy of the property affected.

(5) Same treatment applies to rate-making.

(6) "Deferral" treatment is applied to rate-making.

(7) Stated to be not controlling as to rate-making.

(8) Amount of reserve applied to reduce rate base.

(9) In accounting proceeding, stated interest-free funds from accelerated amortization would be considered in rate-making.

(10) The author does not have presently available complete information as to the position taken by all commissions acting in the matter of accelerated amortization with respect to whether the provision for deferred taxes was to be credited to reserve or surplus, but believes that a substantial majority of commissions provided for such credit being made to a restricted surplus. The trend to date with respect to rapid depreciation has been somewhat to the contrary, with seven commissions providing for reserve credits against five to surplus. This trend may be reversed as additional commissions express their views in this matter.

THE Plant Man's Notebook

BY RAY BLAIN, TECHNICAL EDITOR

A FRIEND of the writer has a seashore place located about 60 miles from his city home. The family spends the weekends at this country place the year round. In winter, about two hours is required to make the place comfortable with the radiant heating system. In order to avoid waiting for two hours in an uncomfortable house, this friend has rigged up a novel device to start the furnace by remote control.

He calls the number of the telephone from the city home. No one is there so there is no answer, but he lets it ring five times and hangs up. This starts the furnace and if he does not arrive within two hours and set the controls, the furnace shuts down. This is an acoustical device, so there are no foreign attachments. The casual caller would not ordinarily let the telephone ring exactly five times and then hang up. But, if he did, the only harm that would be done is that the furnace would start and operate for a two-hour period.

•

According to the *New Jersey Bell* magazine, back in 1893, a telephone construction crew placed three wood cable ducts underground along West Kinney St. in Newark, N. J.

Early this year, the city of Newark scheduled the repaving of this street for July. In advance of this project, the New Jersey Bell company began placing 850 feet of 6-multiple tile duct along this street to supplement the three wood ducts. The old ducts now carry a 900-pair subscriber's cable and two municipal cables. The old wood ducts were found to be still in good condition. This, we believe, is quite a record.

•

In New York City, a phantom "Voice" has been provided for an operatorless elevator installed in a 26-story office building. The "voice" recorded on magnetic tape can announce among other things, "This car up," "Going down," and the floor number. It also doubles as a warning device and if a passenger forgets to press his floor button when he steps inside the elevator, the "voice" reminds him of his omission. When a passenger holds the door open, the "voice" gives him a quick command, "Release the doors, please."

The cost of the "voice" is about three thousand dollars per car.

•

Few people realize that it only costs five cents to talk from the Atlantic to the Pacific, coast-to-coast. Of course, you must be in the right place. This place is the Panama Canal Zone where you can talk from the Atlantic side to the Pacific side for a nickel.

•

The Bell System now furnishes mobile telephone service to more than 12,000 automobiles and other vehicles that may be connected to the nationwide telephone system. The average traffic volume from these mobile stations is more than 300,000 messages per month.

•

Dictation over the regular telephone system is becoming standard practice in large hospitals. This feature is proving to be a great time saver for busy doctors as they are able to dictate reports on their patients quickly and while all details are fresh in their minds.

In order to accomplish this, the doctor simply picks up the telephone and by dialing a single digit code, selects an idle recorder. A second digit starts the recorder and the doctor is ready to dictate. Other code digits will stop the machine, play back the last few words dictated, or alert the typist to a mistake in the dictation.

A recent improvement in this system protects the regular telephone line during the time the telephone is being used for dictation. If the doctor's line is called during a dictation period, a light will flash and an audible signal or buzzer sounds. A key is operated which stops the recorder and holds it connected to the line. This same key switches the telephone back to the regular line that can be answered in a normal manner. After the call is completed, the key is again operated, the recorder started, and the dictation resumed.

•

We are advised by a friend who is the manager of an Independent operating company that he does a big business supplying treated poles to farmers in his area for use in building pole type barns. This is a big accommodation to the farmers as good poles are difficult to procure in many localities. This is also a good public relations angle for the telephone company, and the profits help them financially. The mark-up permits a reasonable profit to the telephone company over and above the cost of handling.

•

The Chesapeake & Potomac Telephone Co. advertises the fact that the guarantee on your telephone never runs out. Your telephone instrument will be repaired whenever you ask, without extra charge. Or, if replacement is necessary, call repair service, and it will be done without extra charge.

This almost unique guarantee, rarely mentioned or thought of, but always in force, is one more value that helps make your telephone the biggest bargain in your budget.

Now if we only had a similar service for television——.

•

It has been said that when it comes to tax reduction, never was so little waited for by so many for so long.

Automatic's research in reception problems bring you this **SPECIAL**

Transistorized Type 80 Monophone

Provides "normal" reception to hard-of-hearing subscribers, even those unable to use a standard telephone. Compact transistor amplifier within telephone housing boosts incoming speech up to 16 times. An inconspicuous knob behind the cradle controls volume. New customers, more satisfied customers, and more revenue await the company that furnishes transistorized Type 80's.

Transistorized Operator's Headset

Amplifies up to 16 times—enables operator to hear very weak signals. Transistor amplifier measures only 2½"x1⅜"x3", is housed with plug to keep headset light in weight. Amplifier starts work when plug is jacked in; draws current from the circuit, needs no other power. Volume control permits operator to adjust gain to most comfortable level.

NEW HELPFUL GUIDE NOW READY! Gives technical facts plus ordering information on all special equipment shown here. Offers valuable tips on which of these tested, proved items will best meet each of your problems. Complete information in new circular T1823, now available. Address: Automatic Electric Sales Corporation, 1033 W. Van Buren St., Chicago 7. Or call HAymarket 1-4300.

roup of Automatic's research scientists
sses application of a new transistor-equipped
uct, still in the "breadboard" stage.

A transistorized telephone that "speaks up" for the hard-of-hearing— a transistorized operator's headset to compensate for reception difficulties: Automatic's rapidly-growing special-purpose equipment line provides better service, builds good will and revenue.

URPOSE EQUIPMENT

UTOMATIC ELECTRIC

ORIGINATORS OF THE DIAL TELEPHONE

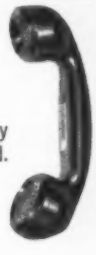
AUTOMATIC OFFERS A FULL LINE OF SPECIAL-PURPOSE EQUIPMENT TO MEET DIFFICULT RECEPTION CONDITIONS.

ROANWELL "CONFIDENCER"

Most economical device you can buy for noisy locations. Fits Type 41 handset (used with Types 40, 43, 47, and 50 Monophones). Contains special sound chambers that neutralize room noise. Slope of mouthpiece brings user's lips closer to insure maximum effect of voice on transmitter.

TYPE 25 HANDSET FOR MODERATELY NOISY LOCATIONS

Inexpensive, yet effective. Ideal for noisy sites where enclosed booths are not practical. Caller presses button on handset to cut out transmitter when listening, releases button to talk.



TYPE 27-A HANDSET FOR THE HARD-OF-HEARING

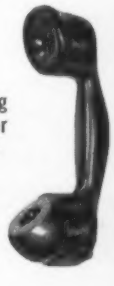
A touch of the button on the handset boosts reception to 12 db above normal - - a level which has proved very satisfactory to the average hard-of-hearing subscriber. Button can be locked at high-gain position.

TYPE 27-B HANDSET FOR EXTREMELY NOISY LOCATIONS

Receiver amplifies sound to 12 db above normal when caller presses button. Cup-shaped mouthpiece catches caller's voice while excluding surrounding noises.

TYPE 38 SPECIAL ANTI-NOISE HANDSET

For locations where high-pitched whining sounds are prevalent, such as in power stations, or in rooms housing oil burners or diesel engines. Special mouthpiece and damped diaphragm transmitter cut off a maximum amount of noise.



Maintenance Testing Equipment

By JOHN A. BRACKEN

MODERN TELEPHONE sets comprise: (1) A suitable housing equipped with an assembly of apparatus such as cord, capacitors, cradle-switch, dial, induction coil, ringer and wiring, and (2) a handset, consisting of a body, "B," a cord, "C," a receiver "R" and a transmitter "T" as in *Fig. 1.*

Telephone manufacturers design and construct their product in such a manner as to prevent insofar as possible the development of trouble.

Nevertheless, trouble occurs, even in the most perfectly engineered equipment, usually due to:

(1) Some small oversight at the factory.
(2) Lack of careful packing or handling in shipment.
(3) Careless handling in storerooms and on trucks.
(4) Accidental injury to component parts or wiring.
(5) Adjustment failure of moving parts.
(6) Tampering by unskilled persons.
(7) Improper use.
(8) Natural wear and tear.

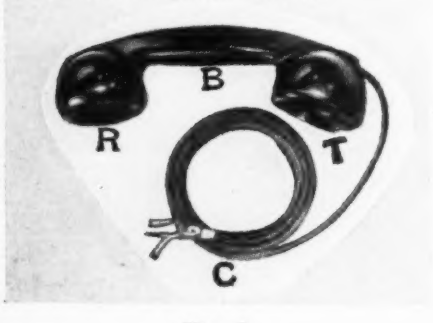


Fig. 1

In view of all this, it is essential to localize the source of trouble or possible defect and remove it. Therefore, a description will be given of the component parts of the telephone and their operation.

For example: *Fig. 2* shows a typical capsule type telephone receiver unit so constructed as to be contained in a case which is molded as part of the telephone handset body, and held in place by means of a plastic cap screwed onto the case. This cap is called an ear cap, and is shown in *Fig. 3*, where "A" represents the ear cap, "B" the receiver unit, "C" the receiver unit case and "D" part of the handset body.

PART 76. The preceding article in this series appeared in the September 3 issue, page 30.

Like most receivers commonly employed in telephonic communication the unit contains a permanent magnet having soft iron extensions attached to the permanent magnet poles. The extensions are polarized by the magnet, one extension becoming a south pole, and the other a north pole.

On the soft iron extensions are placed electromagnets, consisting of coils of very fine insulated copper wire. Squarely in front of the soft iron extension magnetic poles, but not quite touching them, is placed a thin circular iron diaphragm, held in position by a device which tightly clamps the edges of the diaphragm, but leaves the center free to be easily set into vibratory motion.

The receiver unit is also equipped with metallic clips designed to make contact with metallic terminals imbedded in the bottom of the plastic receiver case to provide the necessary electrical connection with the receiver cord circuit.

In converting electrical energy into mechanical energy in the form of sound waves, the telephone receiver functions as follows: The permanent magnet exerts a steady pull on the receiver diaphragm, holding it under constant attraction. If a varying current flows through the electromagnet coils, the strength of the magnetic field between the diaphragm and electromagnet pole pieces is varied. The magnetic pull on the receiver diaphragm is therefore varied, and if the variations are rapid, they will cause the diaphragm to vibrate accordingly.

As a simple explanation of this action, consider a receiver having its permanent magnet removed leaving only the electromagnets and diaphragm. If the electromagnets are then connected to a battery, the diaphragm will be attracted and held motionless due to the steady flow of the direct current from the battery.

Fig. 2

Now, assume that the battery is disconnected and an alternating current is caused to flow through the electromagnets. Then for a complete cycle of current there is a magnetic attraction of the receiver diaphragm causing it to deflect in one direction when the current flowing through the electromagnets is positive, and to deflect in the opposite direction when the current is negative. This causes the receiver diaphragm to vibrate accordingly.

With the receiver permanent magnet replaced, and alternating current again applied to the receiver electromagnet coils, the current produces a vibration of the receiver diaphragm having the same frequency as the current by merely increasing and decreasing the magnetic pull already exerted on the diaphragm.

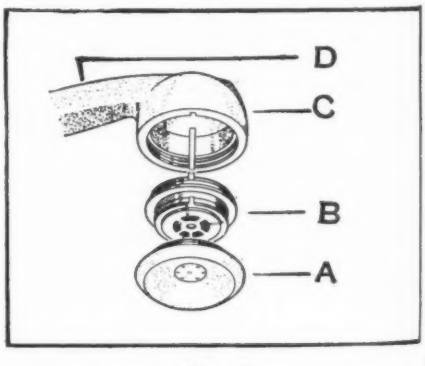


Fig. 3

Regardless of whether current is flowing through the receiver electromagnets or not, there is at all times a steady magnetic pull on the receiver diaphragm by the permanent magnet. Therefore, when a cycle of alternating current flows through the electromagnets, one-half of the cycle weakens the magnetic pull on the diaphragm and the other half increases it. This action produces an emanation of sound waves of the same frequency as the current through the receiver electromagnets.

When the current flowing through the electromagnets of the receiver is

(Please turn to page 40)

PLANTER OF SEED

BY Thomas Hart Benton

Thanks to the telephone, there's one farmer who will get his seed planter repaired in time to start making a cash crop.

Getting needed service is only one of the many benefits the telephone brings to any farmer. And the Telephone Directory plants seeds for more efficient work and more comfortable living.

If your company serves rural subscribers, take a look at your present Telephone Directory. Does it give a farmer *all* the information he wants in the Yellow Pages? Could improvements be made with the problems of the farmer in mind?

One of our representatives can be helpful to you in answering these questions. For the Loomis Advertising Company is retained by many companies that successfully serve rural areas.

It is Loomis' business to build bigger and better directories, tailored to meet the needs of the communities they serve. The result, in every case, is more net revenue for the telephone company.

You owe it to your subscribers, your employes and yourself to find out the advantages of Loomis' Complete Directory Service. Write or call the Loomis office nearest you. There's no obligation on your part.

LOOMIS

ADVERTISING
COMPANY

Over 785 cities and towns in 20 states are served by 257 Loomis-built directories.

We have commissioned Mr. Benton to draw four scenes of American Life. A limited edition of 9 x 15-inch prints suitable for framing has been ordered. We think they offer a nice public relations touch to your telephone office decoration. To get your Benton print FREE, write Wesley H. Loomis III, 810 Baltimore, Kansas City, Mo.

LIFTS YELLOW PAGE REVENUE . . . BUILDS PUBLIC RELATIONS

"Where to Call"

KANSAS CITY
810 Baltimore
HArrison 1-1270

FORT WAYNE
229 E. Berry St.
EAstbrook 3477

Courts and Commissions

Pa. Commission Authorizes $4,000,000 Bond Sale

The Pennsylvania Public Utility Commission authorized the York Telephone & Telegraph Co. to sell 4 million dollars worth of bonds to finance plant improvement and refund outstanding securities, it was reported on Nov. 30.

The company will sell first mortgage bonds, 3½ per cent series, due 1985. The bonds will be privately placed, a company official said. About $1,860,000 of the proceeds will be used to purchase and construct new buildings, with the remainder going for refunding of securities and meeting of bank loans.

Improvements will be completed in 1956 and 1957, the company said. It plans to expand its central offices in York to handle additional lines and provide a higher grade of service.

Montana High Court Upholds Mountain States' Rate Raise

In an opinion expected to be appealed to the Montana Supreme Court by State Attorney General Arnold H. Olsen, District Judge W. W. Lessley on Nov. 22 upheld the Montana Public Service Commission's 1953 order granting higher telephone rates to Mountain States Telephone & Telegraph Co. (TELEPHONY, Jan. 1, p. 36 and Oct. 17, 1953, p. 36).

Judge Lessley said the commission's order granting the telephone rate increases was "lawful, reasonable, just and is affirmed in its entirety."

At the same time, he dismissed the company's cross complaint and Attorney General Olsen's second amended complaint.

The attorney general had contended that "the people are being deprived of about $1,288,000 annually as a result of this telephone rate increase."

Money collected as the difference between the new and old rates by the company has been held in a special account pending outcome of the suits brought by Olsen. Appeals will continue to tie up the money.

The disputed rates included increases for one and two-party residence service in the state's 11 most populous cities and a raise for one-party business service in five larger cities. Mountain States has estimated the increase would net it $910,000 a year.

The attorney general had contended that the increases were unlawful and unreasonable.

The case previously was before the state supreme court on the question of whether Olsen was a proper person to bring the actions, but neither was argued before the high court on its merits alone. The court held that Olsen was a proper person to bring the suits, since the state "is a party in interest."

North Carolina Company Gets Authority to Sell Stock

The Hickory Telephone Co. was authorized by the North Carolina Utilities Commission on Nov. 29 to sell new common and preferred stocks the company said are needed to finance expansion of its facilities. (TELEPHONY, Nov. 12, p. 38).

The company was authorized to reduce the par value of its common stock from $100 to $10 per share by exchanging 10 shares of the new stock for each one share of $100 stock outstanding and also to issue 5,000 additional shares of common stock with a par value of $10 per share, the new stock being issued to present stockholders in proportion to their present stock holdings at a price of not less than $12.50 per share.

The commission also approved sale to the general public of 3,500 shares of 5½ per cent preferred stock at not less than $100 per share, and a stock dividend of 20,000 shares of common stock with a $10 par value, to be distributed to its stockholders at the rate of one new $10 share for each two shares of $10 stock held.

Iowa Company Gains Verdict In Hearing Loss Suit

In Des Moines, Iowa, United States District Judge William F. Riley directed a verdict for the defendant on Nov. 22 in the suit brought by Mrs. A. Kathleen Stoll of Lamoni, against Grand River Mutual Telephone Corp., Princeton, Mo., for $10,000 damages (TELEPHONY, Nov. 26, p. 34).

Mrs. Stoll had sued the company, operator of the Lamoni exchange, on the ground that it was responsible for telephone noises that affected her hearing.

Judge Riley said, in sustaining a defense motion for the directed verdict, that the plaintiff had not proved her case.

Mrs. Stoll said "loud, untimely and harsh" noises in the receiver of her home telephone had caused her to suffer a "constant" ringing in the head.

She said her right ear was affected when she held it to the receiver on Aug. 8, 1953, and her left ear affected likewise on Dec. 24 that year.

Dr. Elmo Lee Gamet, of Lamoni, testified a "roaring or buzzing" in the ears could be caused by telephonic noises.

On cross-examination by the defense, the doctor said noises in the head were "fairly common" among nervous persons, and that he had been treating Mrs. Stoll for a nervous condition before Aug. 8.

Missouri Companies Seek to Issue Stock, Mortgage Note

Cases filed with the Missouri Public Service Commission on Nov. 25 included applications from:

The Luray Telephone Exchange, Inc., for authority to issue 500 shares of no par common stock.

The Golden City Telephone Co., Inc., for authority to issue 700 shares of 6 per cent preferred stock.

The Ellington Telephone Co., for authority to issue and sell 50 shares of preferred stock, and to issue a mortgage note to General Dynamics Corp., Stromberg-Carlson division, in the amount of $38,000.

New York Commission OKs Raises for Three Companies

The New York Public Service Commission on Nov. 29 authorized rates for the Addison Home Telephone Co., designed to increase revenue by an estimated $4,400 annually, effective Dec. 1. The company serves about 800 stations.

In filing its new rates, the company said it has been engaged in an expensive plant rehabilitation program since 1951 and that additional revenues are

required if it is to continue adequate service to its subscribers.

A comparison of present and new rates is as follows: Residence service: one-party increased from $3.50 to $3.75; four-party, from $2.50 to $3.00; multi-party, from $2.00 to $2.50; multi-party rural, from $2.75 to $3.00. In addition, a new 10-party rural rate of $3.25 is established.

Business service: one-party, increased from $5.25 to $6.50; two-party, from $4.25 to $5.75; four-party, from $3.50 to $5.50; multi-party rural, from $3.50 to $5.25. A new 10-party rural business service is also being offered at $5.50.

*

On Nov. 29, the commission also accepted a tariff amendment filed by Candor Telephone Co. designed to increase rates by about $7,000 annually, effective Dec. 1, the date on which its conversion to automatic operation is scheduled for completion. The company serves about 700 stations.

In filing its new rates, the company reported its plant investment has been more than tripled in the past two years as the result of its conversion from magneto to dial service and that additional revenues are required to enable it to continue adequate service.

A comparison of present and new rates is as follows: Residence service: one-party increased from $3.25 to $4.00; two-party, from $2.25 to $3.75; five-party and rural from $2.25 to $3.10. Business service: one-party, increased from $4.50 to $5.50; two-party, from $3.50 to $5.00; five-party and rural, from $3.50 to $4.50.

*

The commission on Nov. 29 also accepted a tariff amendment filed by Cummings Telephone Co., New Woodstock, designed to increase rates to its customers by an estimated $1,900 annually, effective Dec. 1. The company serves about 475 telephone stations.

In filing its new tariff, the company said its operating expenses have increased materially and that even with the increased rates, its net income for the next year will be less than that for 1954 and the additional revenues are needed to enable it to continue adequate service to its subscribers.

A comparison of present and new rates is as follows: Residence service: one-party, increased from $3.50 to $4.25; two-party, from $3.00 to $3.50; multi-party rural, from $2.75 to $3.00.

Business service: one-party, increased from $5.25 to $6.25; two-party, from $4.50 to $5.25; multi-party rural, from $3.75 to $4.25.

West Virginia Commission Approves Company's Raise

Meadow River Telephone Co., Rupert, on Nov. 25 gained authority from the West Virginia Public Service Commission to increase rates for 333 customers served by the Rupert exchange.

The commission specified, however, that the increase would not become effective until a $316,000 proposed improvement program at the exchange has been completed. The planned improvements include conversion to automatic equipment.

Two Wisconsin Companies Apply to the Commission

The Wisconsin Public Service Commission on Dec. 6 was to hear the application of the General Telephone Co. of Wisconsin, Madison, to buy the Fort Winnebago Telephone Co.

The commission was also to hear, on Dec. 8, the application of the Cedar Lake Telephone Cooperative for authority to increase rates.

Northwestern Bell Raises Iowa Intrastate Rates

Northwestern Bell Telephone Co. on Nov. 17 announced that it would increase intrastate long distance rates in Iowa, effective Nov. 28.

The increases amounted to five cents for the initial three-minute period for most station-to-station calls. For person-to-person calls, the increases varied from no charge to 10 cents for the initial three minutes.

Indiana Independent Seeks Higher Rates, Toll Charges

The Tocsin (Ind.) Telephone Co. on Nov. 17 filed two separate petitions with the Indiana Public Service Commission to discontinue "free service" to Ossian, Preble, Poe and Craigville, to institute toll charges, and for an emergency rate increase of $3,700 per year.

The company has 186 patrons.

Oregon Independent Gains Purchase, Stock, Loan OK

Purchase of the Interurban Telephone Co., Silverton, by the Valley Telephone Co. was authorized on Nov. 28 by the Oregon Public Utilities Commissioner.

The sale is to be accomplished by the transfer of a certain amount of Valley company $10 par common stock to the Interurban company.

The commissioner further ordered that the Valley company may sell through Daugherty, Butchart & Cole, Inc., Oregon brokers, 10,500 shares of its $10 par common stock. Also, the Valley company was authorized to borrow $250,000 from Pacific Mutual Life Insurance Co. at 4½ per cent interest.

Proceeds from the sale of the stock and from the loan are to be used to discharge the Interurban company's mortgage debt to the Stromberg-Carlson division of General Dynamics Corp.; also to discharge other obligations, and for improvement and extension of the telephone plant.

Kansas Independent Given OK To Purchase Exchanges

United Telephone Association, Inc., Dodge City, was told on Nov. 29 by the Kansas Corporation Commission it may buy the exchanges at Ashland and Englewood, and convert them to automatic operation.

The commission imposed the restriction that first the REA cooperative must deposit $5,195 in its construction account.

The two Clark County exchanges now are operated by Western Light & Telephone Co., Great Bend.

Duane Walrafen, commission chief engineer, said the two exchanges now have 750 customers. The cooperative proposes to raise $10,388 locally and borrow $469,000 from the REA for the expansion and dial conversion.

N. Y. Commission Authorizes Extension of Service

The New York Public Service Commission on Nov. 30 authorized Jasper-Steuben Telephone Corp. to extend service into that portion of the town of West Union, Steuben County, now served by the cooperative Rexville Telephone Association.

The company sought the authority now granted after the Rexville association, which is mutually owned and operated, decided to disband and members thereof applied to Jasper-Steuben to expand its territory in order to assure continuity of telephone service in the area. Rexville now serves about 35 subscribers.

Nevada Independent Given Permission for Rate Raise

Higher telephone rates, which will produce an estimated $2,000 per month in revenue to the Churchill County Telephone & Telegraph System, Fallon, Nev., were approved on Nov. 12 by the Nevada Public Service Commission, effective Dec. 1.

Residence increases are as follows: one-party, from $2.75 to $3.75; two-party, from $2.35 to $3.00; five-party,

$1.90 to $2.75; 10-party, from $1.50 to $2.50.

Business rate increases: one-party, from $3.60 to $5.10; two-party, from $2.75 to $4.10; five-party, from $2.35 to $3.60; 10-party, from $1.90 to $3.75.

Kansas Co-op Gets Authority To Purchase Independent

The Craw-Kan Telephone Cooperative Association, Inc., Girard, on Nov. 16 was given authority by the Kansas Corporation Commission to buy the property of the Weir City Telephone Co. (TELEPHONY, Oct. 29, p. 37).

Preliminary arrangements were made several months ago. The company now serves 242 customers, but is expected to serve 450 after new dial telephones are installed.

General of Indiana Asks Permission to Borrow

General Telephone Co. of Indiana Inc., Lafayette, recently petitioned the Indiana Public Service Commission for permission to borrow $2,500,000.

The company, serving more than 65 exchanges in Indiana, arranged last May for a $1,400,000 loan from the Bankers Trust Co. of New York. It now wants to raise an additional $1,100,000 from Bankers Trust for expansion of facilities.

Penn. Commission OKs Issue of Common, Preferred

The Pennsylvania Public Utility Commission recently authorized the Leesport Rural Telephone Co. to issue $76,000 worth of preferred and common stock. Most of the proceeds will be used for plant construction.

Of the $36,600 worth of common stock, $26,800 will be issued to present stockholders—a dividend on a two-for-one share basis.

General of California Adds To Public Film Library

Three new 16mm sound films have been added to the film library of General Telephone Co. of California, Santa Monica. The company makes its library available to school groups, service clubs, business firms, social clubs and other organizations on a "free loan" basis. The selection has been planned to appeal to all age groups. Films may be borrowed by contacting the local business office manager.

One of the films most recently added, traces the development of modern methods of communication. Another, on bicycle safety, was produced mainly for children.

IN THE NATION'S CAPITAL

Concluded from page 19

One would think, offhand, that this was not a matter of concern to a telephone company. But the fact is that the majority of the Texas court, in this case, had ruled that an order of the regulatory commission of Texas could not be disturbed if there was "substantial evidence" to justify the commission's ruling. This means that even if the commission's rate order is attacked as confiscatory, and such confiscation is established by preponderance of testimony, it will nevertheless remain standing as long as it could be shown that a "substantial" amount of evidence had been introduced on the other side.

So, although the Texas commission has no jurisdiction over telephone companies, the Texas Telephone Association felt strongly enough about this procedure to file with the state supreme court a brief of protest. The brief asks that the court order either modify the position taken, with respect to the "substantial evidence" rule, or else make it perfectly clear that it does not apply to telephone rate cases.

It is possible that the court will avoid any direct ruling on this by pointing out that telephone rates are not involved and that the association should wait until a case arises in which they are involved. On the other hand, it is possible that the court would be willing to modify its broad ruling or make a distinction, clearly exempting telephone rate cases from the precedent established. Certainly it would be a burden in Texas, or anywhere else for that matter, if a telephone company had to go into court with two strikes against it in the way of balancing the scales of evidence.

TOLL CABLE RESTORATION

Concluded from page 21

which to communicate with other forces and departments.

As the restoration proceeds, the central office man places tone on the next pair on his priority list. The list shows the pair, the priority number, and the kind of circuit. It also shows the previously assigned tag-board number to be used in the emergency jumper cable at the break.

The splicer notifies the central office man every time he reaches the end of a 10-pair tag-board, as a means of double checking and keeping both men synchronized.

Pigtail Splice

The splice is made by twisting together the wires in a pigtail and covering each splice with the usual sleeve of insulation. When the entire cable is finished, the spliced wires can be covered with a boot or other waterproof wrapping if it must be left for some time. The pairs used to establish talking paths between the men in the office and those in the field will, of course, be used for this purpose during the entire operation. It is desirable that these pairs be ones ordinarily used for plant department purposes, such as order wires or alarm circuits, rather than trunks or customer-used circuits.

The operations described above may be summarized as follows:

In Advance: Have priority lists of restoration of all toll cables placed in each office which may be involved. Equip each office with tone, buzzer, and talking sets if these features are not already on the toll testboard.

At Time of Failure:

(1) Dispatch repair crew.
(2) Place tone on first priority pair.
(3) Remove heat coils from other pairs as required.
(4) Run jumper for field supervisor's telephone.

When Splicer Sounds Buzzer:

(1) Place tone on second priority pair.
(2) Establish talking circuit to splicer.
(3) Establish circuit to distant office on first pair restored through the break for use of continuity checkers.
(4) Place tone on next priority pair and advise splicer of tag-board number to use.
(5) Check continuity of this pair.
(6) Repeat this step for each of the remaining pairs.

While this method means that the entire job must be done over again on a flip or half-tap basis when the repair is made permanent, the savings in lost circuit time justify this expense. In a practical application of this scheme, service was restored to priority circuits in less than two hours after the failure.

The writer acknowledges the assistance of S. E. Misuraca, who helped place this plan into effect in the San Francisco division of the Pacific T&T company, and who assisted in the preparation of the training material.

Paystation Raise in Okla.

The Oklahoma Supreme Court recently upheld the right of Southwestern Bell Telephone Co. to raise pay station rates from five to 10 cents. The increase was to take effect on Nov. 26.

RULINGS ON RAPID TAX DEPRECIATION

Continued from page 26

reserve account. The author is not aware how widely this view was held among analysts at that time, nor what proportion of the leaders of that fraternity may hold similar views today as regards rapid depreciation.

Rate-Making Impact

All of the foregoing discussion has dealt with accounting treatment primarily. The tabulation of commission action respecting accelerated amortization indicates those cases where the commissions, either in their accounting orders or by special orders in rate cases, expressly fixed the treatment of accelerated amortization from a rate-making standpoint.

This group includes Federal Power Commission which issued a statement of policy on rates, which policy was followed in the Panhandle Eastern Pipeline Co. rate case. State commissions in this category were those in Missouri, Louisiana, New Hampshire and Washington.

Each of these five commissions, except the last mentioned, adopted the "deferral" principle both for accounting and rate-making. The Washington commission adopted the "deferral" principle for rate-making and the "savings" principle for accounting.

So far, to the author's knowledge, none of the commissions which have acted in the matter of the accounting treatment of rapid depreciation have adopted any specific policy as to rate-making. There seems little doubt, however, that normal practice will be for commissions to follow consistent treatment of accounting and rate-making. This was the case with accelerated amortization in every instance but one and there appears an implication that adoption of the "deferral" principle for accounting would require, in fairness to the utilities, that the same treatment be followed on the rate side.

Inequity could not be claimed in the lack of consistency in the treatment adopted by the Washington commission, since this gave the utilities of that state the protection of normalizing taxes for rate-making, while increasing book earnings in the early years of the life of the certified facilities.

Position of NARUC

The NARUC does not appear to have ever taken any specific position, as an association, with respect to accounting or rate-making treatment for accelerated amortization. However, the association's Committee on Accounting and Statistics, of which Mr. Colbert of the Wisconsin commission is Chairman, issued a report in which the conclusion was reached that rapid depreciation differed from accelerated amortization sufficiently that the reduction in taxes from the former should properly be considered as tax "savings" rather than tax "deferrals," for accounting purposes.

On this accounting theory there would be no provision for deferred taxes and no reserve accumulated. While this report was formally limited to the accounting aspect of the matter, it included certain informal recommendations or suggestions as to possible alternative treatments of the tax reductions for rate purposes.

The author is informed that this report came before the Executive Committee of NARUC at its recent meeting in Asheville, N. C. in October, 1955. Reports differ somewhat as to the exact details of what happened, but regardless of the parliamentary procedure involved, there seems to be agreement that the effect was to table the matter, insofar as action by the NARUC organization is concerned, until its next annual meeting. Furthermore, it is understood it is not the practice of NARUC as an association, either to adopt, approve or authorize reports from its various committees, but merely to receive and print them as information.

Therefore, initiative and decision in the matter should lie with the Federal and state regulatory bodies having jurisdiction.

Federal Utility Commissions

To the best of the author's knowledge, the FCC has taken no official action to date in the matter of the treatment of either accelerated amortization or rapid depreciation for accounting or rate-making purposes, leaving these matters for decision by the state utility commissions as to companies in the telephone industry.

In November, 1954, Columbia Gas System requested the FPC to issue a declaratory order whereby rapid depreciation would be treated for accounting and rate-making purposes substantially in accordance with the orders and statements of policy issued by that commission as respects accelerated amortization. It is presumed this matter will reach the commission for decision some time early in 1956. To date the commission has not had occasion in any proceeding to consider the treatment of rapid tax depreciation for accounting or rate-making purposes.

Summary

To summarize—all 12 state commissions acting to date as to rapid depreciation have been unanimous in treating the tax reductions from this source as "deferrals" for accounting purposes, with every reasonable indication that these commissions will follow the same principles as to rate-making.

It is impossible to predict the action of those commissions which have not yet issued orders in the matter, but, barring exceptional circumstances, it seems reasonable to assume: first, that those commissions which previously acted in the matter of accelerated amortization will be likely to follow the same treatment as to rapid depreciation, and, second, that the "deferral" treatment seems likely to find favor with the commissions generally, although there may be some exceptions.

The principal point of difference will probably continue to be the alternative accounts to which the provision for deferred taxes is to be credited; i.e. some commissions will favor the reserve and others restricted surplus.

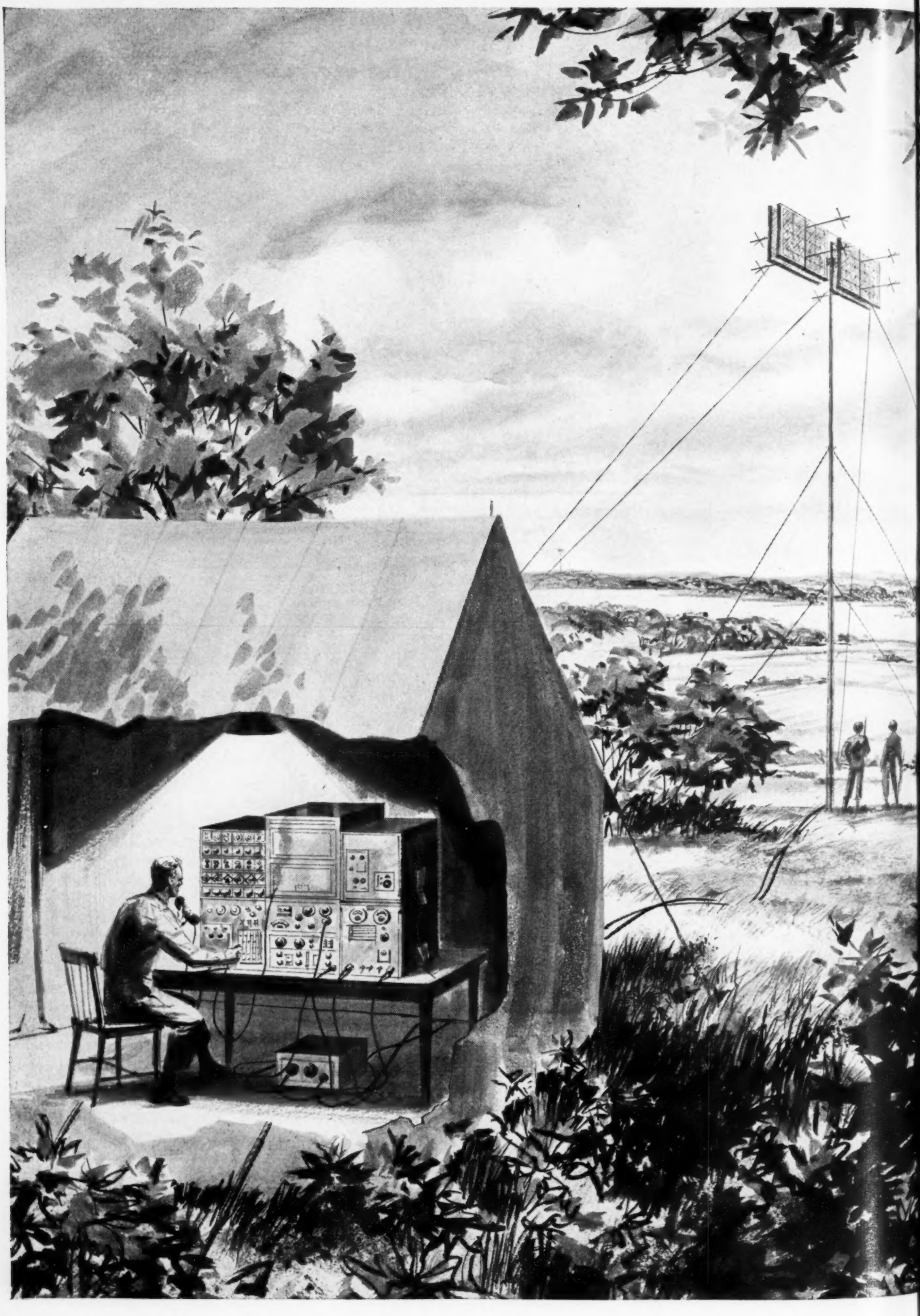
In conclusion, the regulatory "powers that be" of the utility industry appear to be leaning heavily toward the view that rapid depreciation involves a "deferral" and not a "saving" of taxes. While only about 30 per cent of all the state commissions have been heard from, this percentage is increased to about 50 per cent if we add the ten commissions which adopted this principle as to accelerated amortization and assume they will ultimately follow the same principle as to rapid depreciation.

But each utility is primarily interested only in the treatment adopted by the commission in the state (or states) in which it operates. The unanimous trend to date gives no assurance that in a particular state the commission might not reach a different conclusion.

Because some degree of uncertainty is unavoidable until all the regulatory bodies have expressed their views, it is to be hoped that those commissions which have not yet acted in the matter may find it feasible to do so without delay, so that the utilities may proceed to obtain the substantial benefits of the new rapid methods of tax depreciation, as Congress intended they (and all taxpayers) should—without fear of the consequences.

A Real Difference

"The difference between a politician and a statesman is that a politician is true to his party and a statesman is true to his principles."—WILLIAM RANDOLPH HEARST, *late publisher.*



ANTRAC...a portable skypath for Uncle Sam's voice

ANTRAC (Radio Set AN/TRC-24) is a multi-channel portable communications system that links points 25 to 30 miles apart which, because of rough terrain or other adverse factors, cannot be bridged by wire and cable.

Produced by Western Electric from designs developed by the Signal Corps and Bell Laboratories, the ANTRAC radio set—conceived as an extension of the Spiral Four communications system — provides twelve voice channels. This is the first time a completely integrated wire and radio system of such large channel capacity has been available for tactical use by the Armed Forces.

To meet field requirements, the equipment is packaged in convenient transit cases, with a 45-foot antenna mast divided into nine easily assembled sections.

All in all, ANTRAC illustrates very clearly how telephone technology continues to work for national defense . . . not only by contributing to such developments as radar and guided missiles . . . but by serving in the field of military telephone communications, as well.

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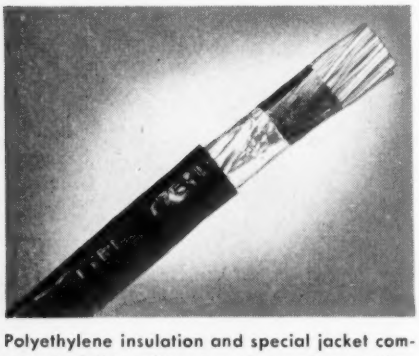
The few dollars you spend on *reliable* equipment today will be repaid a hundredfold in lower maintenance costs for years to come. Protect your investment with the double guarantee offered by Stromberg-Carlson. First, leading manufacturers build this equipment, and guarantee it. Second, because we recommend and sell this equipment to the telephone industry, we *also* guarantee its performance!

Here's easy-handling cable—Aerial, burial or tucked in a duct

You can cut installation and handling costs, save yourself a lot of time, with Ankoseal lightweight plastic cable.



Polyethylene insulation and special jacket compound of this cable give plenty of protection.

It has polyethylene insulation that gives you excellent moisture resistance and thereby eliminates the hazard of wet cable. Another advantage of polyethylene is its high dielectric strength, which means less lightning trouble.

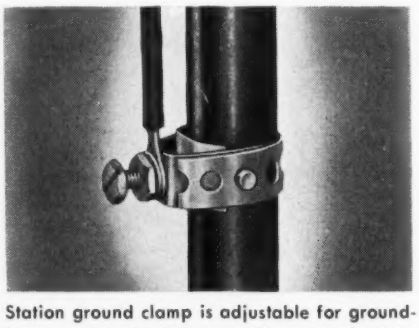
And to give you an unbeatable protection from weather, the Ankoseal 454 jacket compound is used. This special formula not only shrugs off climatic conditions, but also resists corrosion, electrolysis and vibration cracking.

Ankoseal lightweight plastic cable is made for aerial (both messenger and self-supported), for duct and for direct burial installations.

Want a good station ground for ⅜" to 1¼" pipe?

For all telephone, radio and signal circuit station grounds, here is a clamp with a tighter grip than a blonde clinging to a sailor's arm.

It's made by Reliable Electric Company, and has design principles which have been proven in the field to maintain high-pressure contact and maximum conductivity to the joint. This vise-like grip gives you the dependable grounding you need.

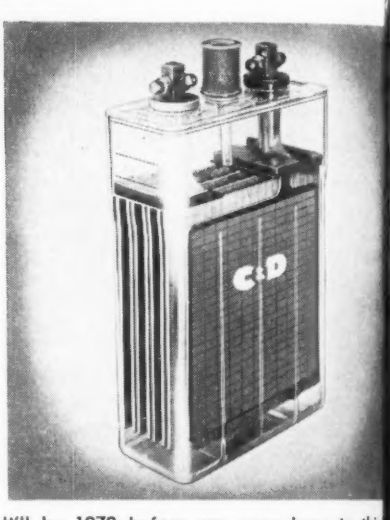


Station ground clamp is adjustable for grounding to water pipe, gives maximum conductivity to joint plus high-pressure contact.

The Reliable station ground clamp is for ⅜" to 1¼" pipe, easily adjusting for any size in that range. It is made of tinned copper strip. The screws and nuts have close-fitting threads.

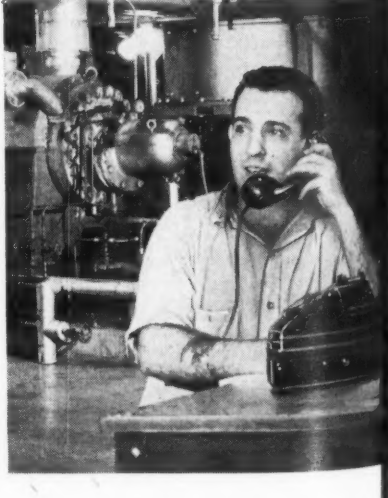
Battery will live 25 years

A quarter of a century is the expectancy of an extra-life battery made by C & D Batteries, Inc. With full-float service, their PlastiCell (lead calcium grids) battery will serve your power needs faithfully —often well beyond its 25-year expectancy.



It'll be 1979 before you even have to think about replacing this extra-life C & D battery if you install it now!

C & D Batteries' PlastiCell (high-tensile, special alloy grids) battery offers reliable power supply at lower cost, with a life expectancy of 14 years.



Noise can be money!

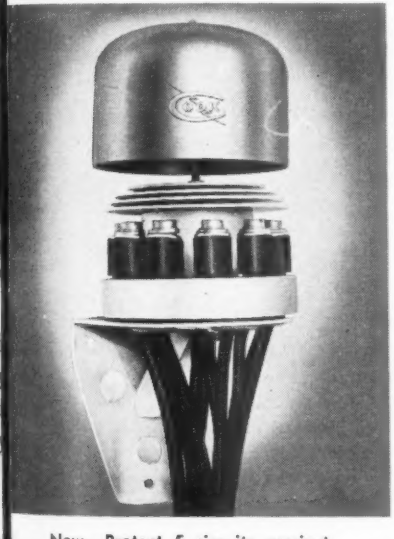
Take a business subscriber who has a telephone in some extremely noisy location—and who has finally decided to do something about it

Would you rather have him spend money in building a soundproofed booth—or give you the money as monthly income on a telephone which completely licks the noise problem?

The GAI-PHONE is such an instrument. It has a special transmitter that actually creates a "Zone of Quiet" around the handset—even in a spot as noisy as a boiler factory! It costs the subscriber less than a booth—and you get the revenue!

The new 5 circuit Hy-Cap Power Cross Protector

Whenever telephones are in joint occupancy with power lines, a heavy-duty protector should protect the telephone lines against destructive power cross.



Now—Protect 5 circuits against power crosses with one protector.

Such protection can now be had when the Cook Electric Company's Hy-Cap 5 Pair Power Cross Protector is installed. This unit mounts on a type 10B cross-arm and will protect 10 lines. Connections are made with pre-cut No. 10 plastic insulated copper wires which terminate on rugged discharge carbons. There is just one ground wire for easier installation. The protector will break down at 3000 volts and will continue to ground the fault current as long as it exists.

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Officers and directors elected at recent convention of the South Dakota Telephone Association are front row, left to right: P. F. Orcutt of Custer, first vice president; Kenneth Hauge of Alexandria, president; Marcus Eastby of Sinia, second vice president, and W. A. Pirner of Delmont, secretary-treasurer. Second row, left to right: Harold Burr of Faulkton; Carl Beier of Freeman; Kenneth Connors of Jefferson; J. W. Tobin of Plankinton; H. L. Peaker of Sioux Falls, and Albert Eklund of Rapid City.

South Dakota Association Holds 51st Meeting

The fifty-first annual convention of the South Dakota Telephone Association was held on Nov. 3 and 4 in Sioux Falls.

The meeting was called to order by the secretary, W. A. Pirner of Delmont. Then followed talks by Robert Peary of Britton on "Problems of Running a Small Exchange"; Mauritz Erkkila, Rural Electrification Administration representative from Mitchell, on "The REA Telephone Program in South Dakota"; by Al Andrews, South Dakota sales manager of Northwestern Bell Telephone Co., on "Merchandising"; by Chris Markle, commissioner, South Dakota Public Utilities Commission, on "The Public Utilities Commission and the Telephone Company," and a talk on "The United States Independent Telephone Association," by Merle M. Hale, president of the USITA.

The first day's program also included a round table discussion, under the direction of L. J. Armentrout of Armour, and an "Operator's Corner," conducted by Helen Van Stone of Aberdeen.

Kenneth Hauge of Alexandria presided at the second day's session. Moving pictures were shown through the courtesy of Northwestern Bell.

The association elected the following directors: Carl Beier of Freeman; Harold Burr of Faulkton; Kenneth Connors of Jefferson; Albert Eklund of Rapid City; Harold L. Peaker of Sioux Falls, and J. W. Tobin of Plankinton.

Officers elected by the association are: President, Kenneth Hauge of Alexandria; first vice president, P. F. Orcutt of Custer; second vice president, Marcus Eastby of Sinia, and secretary-treasurer, W. A. Pirner of Delmont.

General of Kentucky Names Training and Safety Head

H. J. Huether Jr., president, General Telephone Co. of Kentucky, announced on Dec. 1 that Ray S. Cornish Sr. has been promoted from Lexington district plant supervisor to the newly created position of general plant training and safety supervisor, and William T. Plunkett, assistant Lexington district supervisor, has been promoted to the district supervisorship, succeeding Mr. Cornish.

Mr. Cornish has been associated with the General Telephone Co. of Kentucky and its predecessor companies since 1919, serving in various capacities in the plant department. In his new job he will have the responsibility for the company safety program and the training of plant department personnel. Mr. Cornish has two sons, both of whom are employed by General of Kentucky at Lexington, Ray S. Cornish Jr. as chief switchman, and James Cornish as a facility engineer.

Mr. Plunkett started his telephone career with the General Telephone Co. of Kentucky as a combinationman in 1947, and has progressed through the ranks to his present position. He is a veteran of World War II and the Korean War, having served in the Air Force.

Indiana Telephone Executive Is a Rotary Governor

John A. Harbaugh, president of the Sullivan (Ind.) Telephone Co. since 1924, is serving as a district governor of Rotary International, world-wide service club organization, for the 1955-56 fiscal year.

As governor, he coordinates the activities of 24 Rotary clubs in one of three Indiana districts. During the year, he will visit each of these clubs to offer advice and assistance in Rotary service work and club administration.

Mr. Harbaugh is a director and past president of the Indiana Telephone Association.

He has been a member of the Rotary Club of Sullivan since 1925 and is a past president of that club.

Obituary

ROBERT SILER DURANT, 63, general manager of the commercial department of the Rock Hill (S. C.) Telephone Co., died suddenly on Nov. 30.

A native of Union County, N. C., he entered the telephone business with Southern Bell Telephone & Telegraph Co. at Charlotte, N. C., after graduating from Presbyterian College at Clinton. He then joined the Independent Telephone Co. in Siler City, N. C., and on Mar. 1, 1928, became vice president and general manager of the Central Carolina Telephone Co. In July, 1936, Mr. DuRant was elected vice president of Investors Telephone Co., parent company of the Central Carolina company.

He later became president of the Iowa State Telephone Co., Newton. He had been at Rock Hill since 1947.

He was a former president of the North Carolina and South Carolina Independent Telephone associations, and was secretary of the South Carolina Independent Telephone Association. He also had been a director of the Iowa Independent Telephone Association.

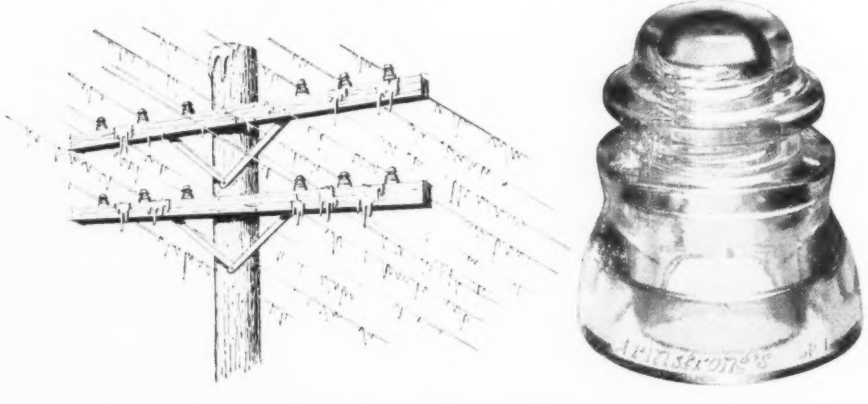
Surviving are his widow; a daughter, Mrs. R. L. Chandler Jr. of Southern Pines, N. C.; and two sons, R. S. DuRant of Lumberton, N. C., and R. W. DuRant of Durham, N. C.

Missouri Independent to Buy

The Inter-County Telephone Co., Gallatin, Mo., was recently reported to have contracted for the purchase of the Grant City Telephone Co. An automatic system is scheduled to be in operation in Grant City by Nov. 15, 1956.

Tangier, Gibraltar Linked

A new radio-telephone circuit has been opened between Tangier and Gibraltar.



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Armstrong GLASS INSULATORS
for communications . . . for power

MAINTENANCE TESTING

Continued from page 30

varied at the frequency used in speech, it will enable the receiver diaphragm to follow and respond to the variations of the current, and the diaphragm will vibrate in unison or harmony with the current variations.

As the diaphragm vibrates, the pressure of the small quantity of air trapped between the diaphragm and the listener's ear, varies in accordance with the vibration of the diaphragm. This action reproduces the sound waves impressed upon the telephone transmitter at the other end of the circuit.

Although modern telephone receivers are so constructed as to be practically free from trouble, there are a number of causes that possibly could affect their proper operation, in which event transmission is greatly impaired. For example:

(1) Open electromagnet coils.

(2) Short-circuited electromagnet coils. If completely short-circuited, the voice current, instead of flowing through the electromagnet coils, will be shunted around them, and no effect will be produced upon the receiver diaphragm.

(3) Loss of magnetism in the receiver permanent magnet due to jarring, dropping, or excessively rough treatment.

(4) Diaphragm bent, dented or corroded.

(5) Foreign substance on either face of the diaphragm.

(6) Receiver case cracked or broken.

(7) Receiver ear cap broken, cracked, loose or cross-threaded.

(8) Damaged, missing or improperly assembled parts.

(9) Improper adjustment of receiver parts.

(10) Mechanical defects in the receiver unit.

(11) Insufficient ampere-turns on the electromagnet coils.

(12) Loose, broken or incorrect electrical connections.

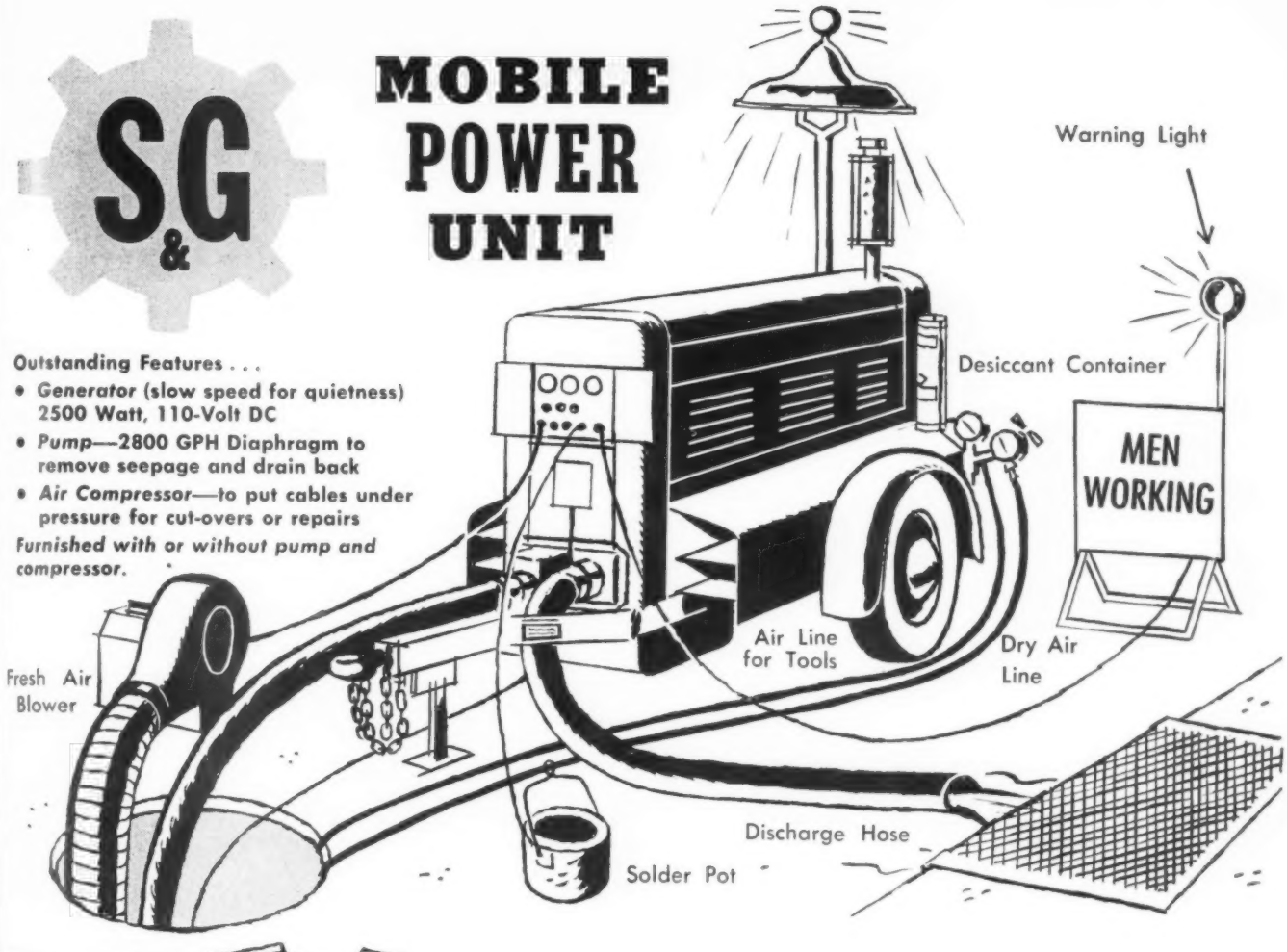
On a report that a customer cannot hear, the first thought usually is that the fault exists in the receiver. In such cases, it is a comparatively simple matter to replace the receiver unit.

It is still better to determine the actual cause of the trouble before replacing the receiver unit by (1) visual inspection of the unit for a mechanical fault and (2) electrical test.

A test for an electrical fault can be easily applied by means of an ohmmeter. For example, an open in the electromagnet coils can be tested for by first removing the receiver unit from its case and then connecting the ohmmeter test cords to the terminals of the unit.

If the electromagnet coils are open,

S&G MOBILE POWER UNIT



Outstanding Features . . .

- ***Generator*** **(slow speed for quietness) 2500 Watt, 110-Volt DC**
- ***Pump*****—2800 GPH Diaphragm to remove seepage and drain back**
- ***Air Compressor*****—to put cables under pressure for cut-overs or repairs**

Furnished with or without pump and compressor.

- 300 Watt floodlight illuminates working area
- operates soldering pot and iron, electric and air tools
- electric blower to ventilate manhole
- supplies dry air for cable cut-overs, flash testing, etc.
- diaphragm pump can be operated from manhole by push button control
- buzzer signal for summoning helper
- light, easy to handle

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no reading will be obtained on the ohmmeter scale. The same simple test can be applied for a short circuit. If the receiver unit is short-circuited, a zero reading will be indicated on the ohmmeter scale.

In cases of receiver trouble where the fault cannot be corrected satisfactorily, the best remedy is to replace the receiver unit.

(To Be Continued)

Elementary Electricity Quiz

Below are five questions. Underline the number in parentheses which you consider the right answer to each question.

(1) The resistance in a circuit is such that a current of 0.005 amperes is produced when a 24-volt battery is connected to it. If this resistance is reduced by 2,400 ohms, will the current by a 48-volt battery be (1.7) (0.9) (2.4) (0.02) or (0.5) amperes?

(2) If 275 turns of the wire wound on a relay are short circuited and thereby produce a loss of 12 per cent of all the turns, was the total number of turns on the relay equal to (1,615) (2,292) (3,476) or (4,844) turns?

(3) In rebuilding the outside plant of a telephone exchange, the management contracted for 4,756,914 pounds of cable to be delivered in equal amounts, the deliveries to be received three times per month for a period of nine months. Did the number of pounds delivered in each lot equal (313,947) (176,182) (249,537) or (144,836) pounds?

(4) Five dry cells each having an EMF of 1.5 volts and an internal resistance of one ohm, are connected through an external resistance of 2.7 ohms. (a) When the cells are connected in series will the current be (0.97) (0.89) (0.15) (1.1) or (0.68) amperes? (b) When the cells are connected in parallel, will the current be (0.63) (0.739) (0.436) (0.517) or (0.215) amperes?

(5) An electric heater has 12 heating units of equal resistance connected in parallel. The resistance of each unit, when hot, is 50 ohms. If operated on a 110-volt circuit, will the current passing through be (28) (37) (26) (8) or (13) amperes?

See correct answers on page 49.

Berkshire Life Completes Loans to Two Independents

Berkshire Life Insurance Co., Pittsfield, Mass., on Nov. 30 announced completion of the following mortgage loans to two Independents.

Deposit (N. Y.) Telephone Company, Inc., a 25-year first mortgage loan in the amount of $200,000.

Purpose of the financing was for construction of a new main office and exchange building in Deposit and for completion of the company's program of converting its entire operation to automatic in all its exchanges.

This was Berkshire's second loan to the Deposit company.

*

Farmers Mutual Telephone Co., Clarinda, Iowa, a 25-year first mortgage loan in amount of $300,000.

Purpose of the financing was for funding notes issued in connection with construction of a new office and exchange building in Clarinda and for conversion to automatic operation.

The loan was Berkshire's 41st piece of Independent telephone company financing.

72% of American Households Have Telephones, AT&T Says

About 72 per cent of America's 47,400,000 households had telephones as of Sept. 30, the American Telephone & Telegraph Co. reported recently.

AT&T said there were 55,235,000 telephones in use in the U. S. at the end of September—more than half the estimated 99 million telephones in the world.

Of the U. S. total, 47,075,000 telephones were serviced by 23 companies belonging to or associated with the Bell System. The remaining 8,160,000 were served by 4,790 Independent companies, the report stated.

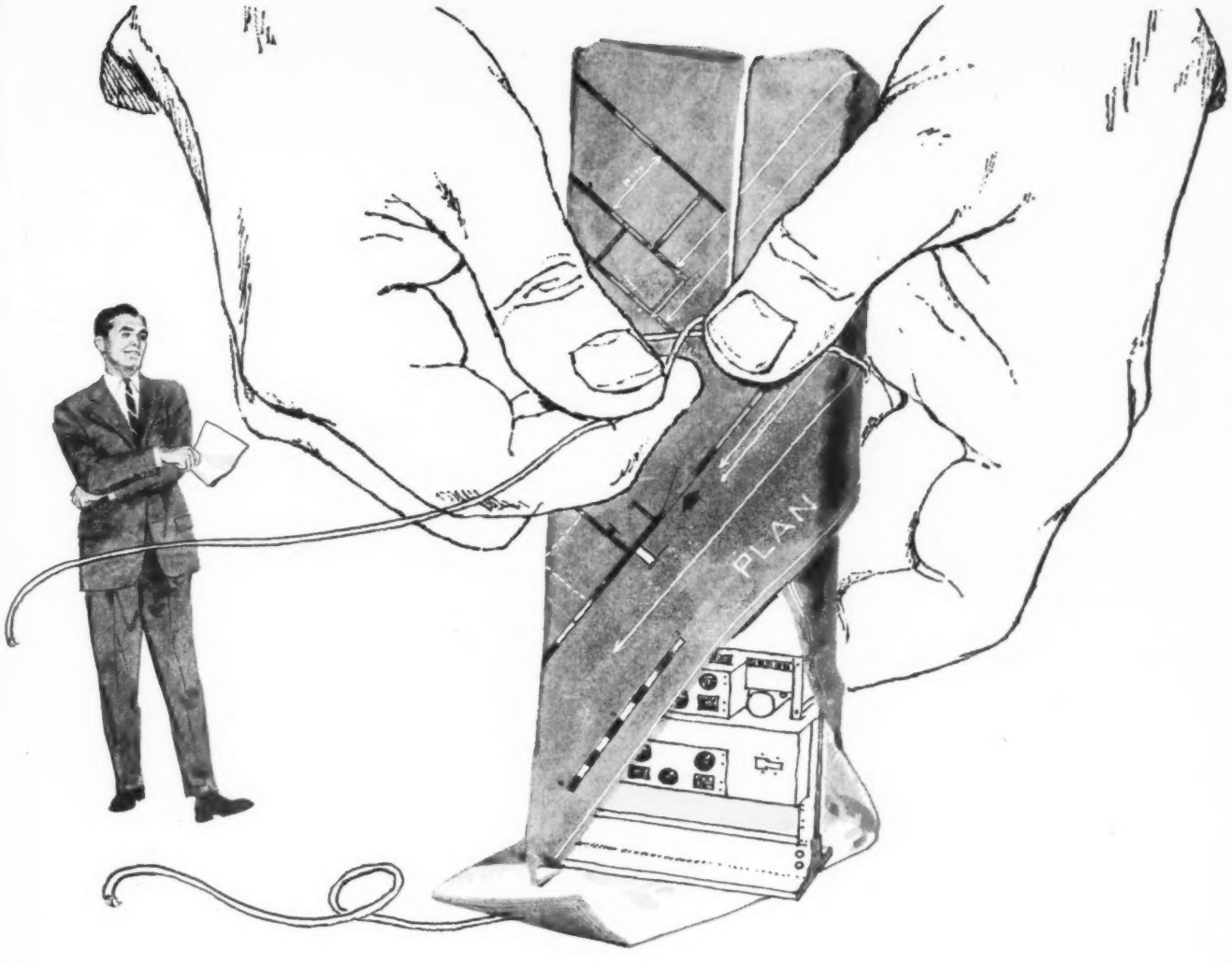
Americans average 198,400,000 telephone conversations daily.

During the first nine months of 1955, the Bell System spent $1,147,000,000 for new construction and paid out $2,336,426,000 in wages. The latter figure includes Western Electric Co. and the Bell Telephone Laboratories.

As of Sept. 30, the company said, 1,385,000 stockholders owned a total of 50,976,000 shares of AT&T stock.

Unvarnished Facts

"It was clear from the beginning that we would have to step on a lot of toes. Whenever you scrutinize government functions you run up against people with a stake in things as they are. But that did not deter us. We had a job to do, and the only instructions I gave the task forces were: 'Come in with all the facts and the truth of the situation'."—HERBERT HOOVER, *Former President of the United States.*



Now you can buy your long-distance and trunk circuits "BY THE PACKAGE"

Here's a new service—brought to you by two of the leading suppliers of communications equipment. Combining Lenkurt's "EF&I" (Engineer, Furnish, and Install) service with Automatic Electric "Follow-Thru Engineering", it makes it easy for you to have the carrier or microwave equipment you need, without overloading your engineering and installation staff. This new "package plan" is broad enough to handle complete projects, yet flexible enough to provide economically just the services you need.

Through this "package plan" you have the opportunity to contract for any or all of these services:

1. Specific recommendations. Experienced project engineers study your problems and draw up an economical, workable plan to meet present and future requirements. Then they make detailed equipment recommendations—*telling you why.*

2. Detailed specifications. Our engineers provide all the specifications you need to order your equipment.

3. Expert installation. Thoroughly trained specialists handle all the details of the installation, and turn the system over to you, ready for service, on the date promised.

4. Office records. You are furnished, for record purposes, the engineering details showing how this system was incorporated into your plant. You will receive field surveys, floor plans, cable and power connecting charts—all the records you'll need for future use.

5. Staff training. You are provided detailed equipment bulletins and line-up and operating instructions for your personnel. Engineers assigned to your installation will train your men right on the job, giving them the basic information necessary to understand and service the equipment.

6. Follow-up counsel. Even after your system is in operation, this same helpful service continues. When assistance on rearrangements or expansion is needed—or any time you can profit from experienced counsel—this service is available to you.

For complete details on how this "package plan" service can help you to quickly and easily get the long-distance and trunk circuits you want, *write:* Automatic Electric Sales Corporation, 1033 West Van Buren Street (HAymarket 1-4300), Chicago 7, Illinois.

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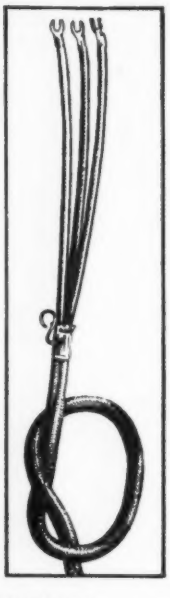

After all, there is only one way to sensibly evaluate telephone cord performance and that is to put them to the final test —*actual service!* So we invite you to "service-test" COMMERCIAL CORDS on your own installations and judge for yourself. We'll gladly furnish cords for such tests if you'll tell us about your requirements.

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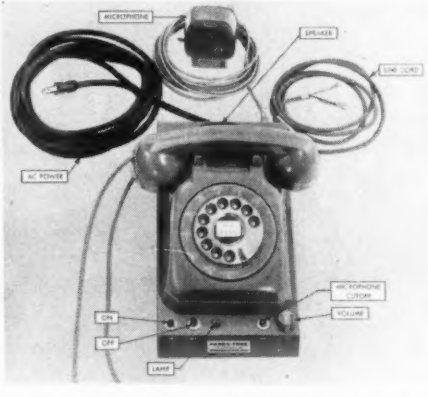
CORDS FOR ALL MAKES AND TYPES OF TELEPHONE INSTRUMENTS

News on New Products

HANDS-FREE TELEPHONE—A new type of hands-free telephone by which a telephone user can carry on a conversation from as far as 20 feet away from the instrument, or by which a large group can participate in a telephone conference without passing a bulky instrument from one to another, has been announced by the Stromberg-Carlson Co., a division of General Dynamics Corp.

Ease of installation is one of the principal features of this new Stromberg-Carlson hands-free telephone, as it



is a completely self-contained instrument except for the microphone. Only three steps are required—connecting the line cord to the normal baseboard terminal block, plugging the power cord into any 110-volt ac outlet, and plugging the microphone into a jack on the instrument. All these operations can be completed in less than 15 minutes.

The speaker of this hand-free telephone is contained in the base of the instrument, but the microphone is separate, weighs only four ounces, and has a 12-foot cord. Speech and hearing are amplified, and an automatic volume control maintains loudspeaker volume at a constant level. This prevents "booming" when an individual speaks too closely into the transmitter.

The microphone is sensitive in all directions, and so can conveniently be used for a group telephone conference simply by placing it near the center of the group. Or, if desired, the 12-foot cord allows it to be easily moved for best group placement.

Controls on the Stromberg-Carlson hands-free telephone include push buttons for "on" and "off" switching, a volume control, and a special microphone cut-off button, by which anyone using the telephone can cut off the microphone temporarily, so that the listening party cannot hear extraneous conversation going on in the room.

To initiate a call on the hands-free telephone the user simply depresses the "On" button on the base of the instrument. A signal lamp lights, indicating that, as long as the lamp is on, the telephone is in off-hookswitch position. As soon as the operator answers, or the dial tone is heard, the call is placed or dialed, just as with a conventional telephone. To answer an incoming call the user just depresses the "On" button and speaks into the microphone. There is no waiting for "warm-up" time. The volume control provides adjustment of the loudspeaker volume to any desired level.

While the conversation is in progress the telephone user can continue to work at his desk with his hands free, use a slide rule, walk about the room, look

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12/10/55

up papers in files—in short, do just about anything, while continuing to talk and listen. Upon termination of the call the user simply depresses the "Off" button, which is the equivalent of hanging up a conventional telephone handset.

If desired, for privacy or other reasons, the hands-free telephone can be used exactly like any conventional telephone, simply by picking up the handset. In the event of failure of the ac power, the Stromberg-Carlson hands-free telephone continues to serve as a conventional telephone.

The new telephone is finished in office gray, to harmonize with modern office equipment and decorations, and is extremely compact, occupying little more space than a conventional telephone. It can be used "back to back" with any conventional telephone, or with any other hands-free telephone, with complete satisfaction. Request NP464.

•

CATHODIC PROTECTION— A new concept in impressed-current cathodic protection has been developed by National Carbon Company. The system comprises a graphite anode and an

assembly technique which fixes the anode on a wire or cable at the exact point where it will do the most good.

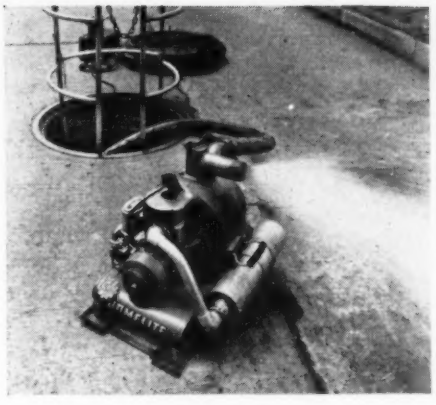
The anodes are attached by means of crimp type connectors on sizes 4, 6 or 8, seven strand wire, at any desired spacing. They are shipped from stock ready for assembly in three standard sizes: 2 inches x 12 inches, 2 inches x 20 inches and 3 inches x 30 inches.

These anodes were developed for installation in cable ducts. In such applications, the anodes are spaced to provide protection of metallic sheathed cables in adjacent ducts at relatively low current consumption, thereby minimizing interference effects. They also can be assembled at any desired spacing on long wires and installed in ditches to protect paralleling bare pipe runs.

When bedded in carbonaceous backfill the new anode's costs are comparable with larger graphite anodes plus greater flexibility in installation and generally lower circuit resistance per ampere capacity. Request NP465.

•

CENTRIFUGAL PUMP—A new self-priming centrifugal pump has been



announced by Homelite a division of Textron American, Inc. The new Model 36S2 pump is designed to work efficiently at low-noise-level, slow speed operation—yet deliver a full capacity of 9,000 gallons per hour.

The new Model 36S2 is equipped with a carburetor that can be throttled down to permit high "on the job" capacity yet "whispers while it works."

The Homelite 36S2 weighs only 87 pounds. Fast to set up, quick to start, the 36S2 has a guaranteed 28-foot suction lift and 65-foot total head including friction, the company states. Automatic-priming at 5-foot suction lift takes just 9 seconds. The automatic seepage control keeps water right down to strainer level for dry working conditions. Simple design and operation, clog-proof impeller, and dependable Homelite engine make the 36S2 an extremely low-cost unit to operate and keeps maintenance expenses to a minimum, it is said.

Powered by a single-cylinder, air-cooled, two-cycle Homelite gasoline engine governed for speeds between 2,550 and 2,650 rpm at open throttle, the 36S2 Homelite pump can be reduced to quiet speeds between 1,200 and 1,500 rpm by simply closing the throttle. Request NP466.

•

AUGERS—A new line of augers for diggers has been announced by J. H. Holan Corp.

Augers are available for digging holes from 8 inches to 22 inches in diameter and 8 feet deep. Auger diameters are 8, 9, 10, 12, 14, 16, and 22 inches.

There are three types of augers—anchor, short flight and long flight. The anchor augers are used for digging anchor holes at an angle. Short flight augers are 6 feet long with 3 feet of flighting; long flight augers are 6 feet long with 5½ feet of flighting.

Holan augers can be furnished with either the Holan standard head or Pengo head. Holan cutter head and points are grooved so they fit together

Thompson Field Research, the most extensive in the industry, now tells you the best way to destroy all mixed brush and hardwood growth during the dormant season . . . effectively . . . economically.

Thompson's proven spray techniques and its Broad Spectrum Bramblcide deliver almost complete kills at unequalled low cost.

In addition to the economy, and better employment of manpower, dormant season basal bark control (and stump treatment) is free from the possibilities of danger to susceptible crops and helps to further public good will.

Many of the world's largest users of herbicides specify Thompson, one of America's few basic manufacturers of selective herbicides. Inquire.

Write for Research Station Papers No. 19 and 21, mentioning type of brush to be controlled and number of miles of right-of-way involved. Favorable utility chemical prices submitted on request.

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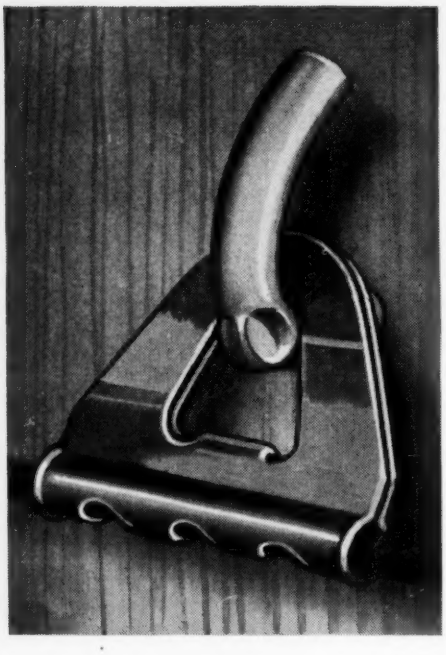

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DROP WIRE CLIPS

Wherever intermediate fastenings are needed on straight line drops, these convenient clips can be installed in a matter of minutes. No special tools are necessary. Simply slip the clip onto the wire and crimp it tight with pliers. It will hold firm permanently . . . without damage to the wire or insulation. KEARNEY Drop Wire Clips can be used with either parallel or twisted pair drop wire.

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for perfect alignment. Pengo cutter heads feature a twin-helix pilot bit that provides two equal cutting areas; this results in a balanced thrust and automatic centering of the head. Both heads are designed to give straight holes and to reduce wear.

The new line of augers was developed for use with Holan 4401 mechanical and hydraulic portable earth borers. Request NP467.

•

TRUCK LADDER—A new ladder that incorporates both mechanical and hydraulic principles is also being manufactured by J. H. Holan Corp.

A low-pressure hydraulic system combines with center mast counterbalancing to provide rapid, easy lowering and raising of the ladder. Elevating locations are infinite, and the angle of elevation can be changed with ladder fully extended—safely and without effort. A man can stand on the platform while the ladder is lowered fully extended.

A Holan-designed two-speed pump supplies oil to the 3-inch-diameter lift cylinder, which is also Holan-designed. The operator selects high or low raising speed by positioning the pump handle, then pumps up the ladder quickly and easily. The ladder is lowered automatically by turning a handle that opens a needle valve and releases oil from the bottom of the lift cylinder.

Some other design features of the newest Holan aerial unit include:

(1) Rotation crank located directly behind the ladder for better spotting view, easier turning and maximum clearance between ladder and truck body wall.

(2) Flow control valve that locks the ladder in position and prevents overtravel, drifting or bouncing.

(3) Check valve that prevents ladder from dropping if hoses break.

(4) Tubular support frame that weighs less but gives more strength.

The new ladder, known as the Series 2500 manually-operated hydraulic ladder, rotates 360 degrees and elevates to 72 degrees. It is available in 24, 28 and 32-foot ground-to-platform heights with standard or Duo-Level platforms. Rotation can be worm and gear or pin type and telescoping bar.

J. Howard Holan, president, said the new and exclusive duo-level platform design features a floor with two working positions. The result is sure footing regardless of ladder angle.

At higher angles, the workman stands on the part of the floor located in the conventional position. At lower angles, he steps down onto the part of the floor that extends out at an agle. For both working positions, the floor can be adjusted with the levelling bar.

When working on the lower-angle floor position, the workman feels stable due to the height from the platform floor to the top of the guard rail.

The aluminum platform is lightweight and has a non-skid Kass safety tread floor.

Holan's new platform assembly will be an optional feature on all Holan

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IT'S AS SIMPLE AS ADDING ONE PLUS ONE! Kennecott lead-alloy sheathed Telephone Cable gives dependable, long-lasting service because of superior manufacturing techniques, *plus* rigid quality tests. For example, Kennecott's *exclusive* "Young Process" produces lead sheath, virtually free from oxides and impurities. Tests *prove* that this lead sheath is stronger—has a much higher life expectancy than ordinary lead sheaths. Contact the Chase sales office near you for full details.

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comes
but
once a year
to bring
us
Happiness
and Cheer

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mechanical and hydraulic ladders and can be installed on models already in use. Request NP468.

•

RECORD CARD HOLDER — Speeding reference and lightening the work load in handling 8 inch x 5 inch record cards is now possible with Remington Rand's new space-saving record-keeping unit called the Roto-Kard.

The new Roto-Kard handles 8 inch x 5 inch card records for cost, credit, inventory, ledger, maintenance, personnel, pricing, production, purchase, sales in one compact electrically or manually operated rotary drum.

Completely mobile for easy rolling to its point of use, the Roto-Kard has a capacity of 6,000 8 inch x 5 inch cards (9½ pt. stock) for a reference record or 4,500 cards for a posting record.

Occupying a floor area of only 3.6 square feet, the new unit has removable self-contained desk-tray segments for job distribution and peak load period handling. A Slide-A-Deck feature permits, for the first time on a drum file, the shifting of complete decks of cards between segments, without fear of misplacing or dropping.

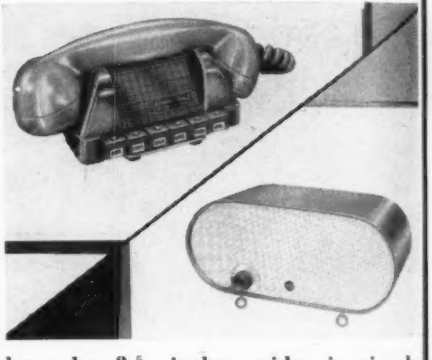
Built to standard desk height, Roto-Kard eliminates excessive operator exertion and fatigue and maintains a high record-keeping efficiency. An easily removed linoleum-covered posting shelf for front mounting on the unit permits postings with a minimum of wasted motion. Provision is made for quick inserting and easy removal of individual record cards without card damage. Request NP469.

•

INTER-COM SYSTEM—A 2-to-10 station inter-office telephone system, that offers the advantages of a telephone communication combined with such services as two-way loud speaker station, voice paging, conference circuit and loud bell signals for noisy areas is currently being produced by the Connecticut Telephone & Electric Corp. The new telephone, called the Connecticut Direct-A-Call, operates from a standard electrical outlet and uses no batteries or tubes.

Designed so it can be used either on top of, or mounted on the side of a desk without alterations of any kind, the compact Direct-A-Call, occupying only a 4 inch x 6 inch space, allows quiet, person-to-person inter-office telephone conversations. Informal office conferences, too, may be held over the telephone.

The compact power supply, measuring 3⅛ inches high by 4⅝ inches long by 3⅝ inches wide, is simply plugged into any 110-volt outlet. Color-coded wires leading from the power supply are attached to the telephones at their desired location. There are no soldered connections to make—the only tool needed is a screw-driver.



In a typical five-telephone installation, four push buttons on each phone buzz each of the other four stations separately, although businesses needing as few as two, three, or four telephones, or as many as 10, would use a corresponding number of calling buttons. Request NP470.

•

HAMMER BITS — A new tungsten carbide tipped hammer bit in sizes 3⅛ inches through 1½ inches has been developed by Tilden Tool Mfg. Co. These bits are of the solid chisel point type thru ⅝ inch, and core type with pat-

Rolatape, Inc., manufacturers of measuring wheels—and their many dealers wish to one and all—sincere SEASON GREETINGS!

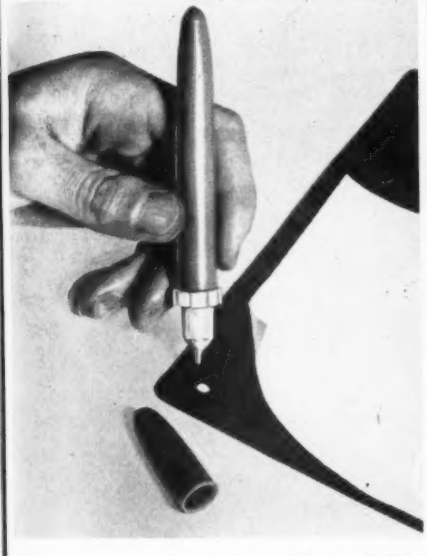
Rolatape, Inc., Santa Monica, California

ented core slot in larger sizes having multiple carbide cutters. The advantage of the core type hammer bit is that it only drills the perimeter of the hole, thereby appreciably increasing the capacity of the hammer and drilling speed in hard masonry or rock.

These hammer bits will operate in self-rotating air or electric hammers as well as standard hammers employing turning chucks. Removable extension shanks and extra length bits are available. Request NP471.

•

PEN TYPE ADHESIVE APPLICATOR—Poppet, a new vest pocket pen-type adhesive applicator is a very handy aid for anyone who has frequent use



for mucilage or paste. This pliable plastic pen ejects a small dot of rubber cement each time it is tapped where cement is desired. It comes equipped with a cap, so it will not soil the pocket or purse.

The manufacturer says that the pen will hold enough adhesive to make about 5,000 dots. Refills are available in throw away plastic ampoules. To refill, the top of the Poppet is simply unscrewed and the adhesive is poured in. The rubber cement can be rubbed off easily from any surface where it is not wanted and will not soil the fingers. The manufacturer guarantees that the Poppet will not clog. Request NP472.

Answers to Questions On Page 42

(1) 0.02 amperes.
(2) 2,292 turns.
(3) 176,182 pounds.
(4) (a) 0.97 amperes (b) 0.517 amperes.
(5) 26 amperes.

DON'T GAMBLE

...on unproved preservatives

You're not gambling when you use Creosote. Service records have proved that pressure-creosoted poles last 3 to 5 times longer than most types of untreated poles. That's why Creosote is called the "30-year-plus preservative." To get this kind of quality and long life, always insist on clean poles, pressure-treated with Creosote—the proved preservative. Koppers Company, Inc., Tar Products Division, Pittsburgh 19, Pennsylvania.

DON'T GAMBLE — USE THE PERFORMANCE-PROVED WOOD PRESERVATIVE

KOPPERS

CREOSOTE

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Chicago, Ill., 122 S. Michigan Ave.
Boston, Mass., 250 Stuart Street
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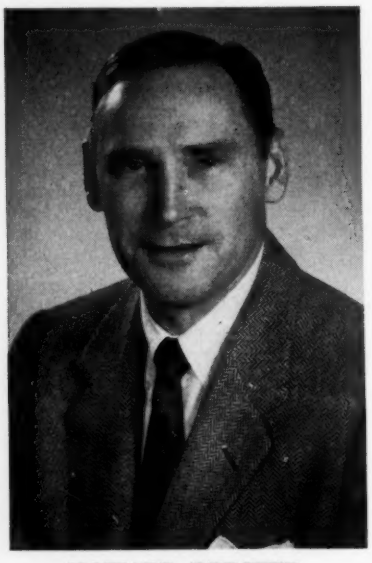
AE Names Howard Bersted Director of Publicity

Howard Bersted, formerly sales promotion manager, Leich Sales Corp., has been named director of publicity of



HOWARD BERSTED

Automatic Electric Co. L. H. Warner, president, made the announcement.

In his new position, Mr. Bersted will have over-all supervision of the company's advertising programs and related activities.

Mr. Bersted joined Leich Electric in 1946 as advertising manager after wide experience in the industrial advertising and advertising agency fields. He was promoted to sales promotion manager in 1954.

Stromberg-Carlson Leases Additional Offices

Offices of Stromberg-Carlson, a division of General Dynamics Corp., are being expanded through leasing of a portion of the second floor of the former Wilmot Castle Co. plant at Rochester, it was revealed on Nov. 28 by George E. Eyer, assistant secretary and director of industrial relations of Stromberg-Carlson.

Legal details of the lease are being worked out by attorneys for Stromberg-Carlson and Mandeville & King Co., owner of the building, Mr. Eyer said. Meanwhile, occupancy of some parts of the leased space by Stromberg-Carlson personnel already has started.

The leased area will provide approximately 14,000 square feet of floor space that is urgently needed for the Stromberg-Carlson offices. Among the offices that will be moved to this building will be the XY training school, where new installers and customers' employes are trained in the operation and maintenance of the Stromberg-Carlson XY dial telephone switching systems, the Stromberg-Carlson Credit Corp., the patent department, stationery stores, and the direct mail advertising and mailing department.

Teamwork in Business

"We want good relationships with individual employes, employes as a group, and with their union, to the end that we have an informed, hard-hitting team working together to make quality products which permit of adequate profit, aware that the best interests of the team, including owners, depend upon such performance."— JOHN A. STEPHENS, U. S. Steel Corp. industrial relations vice president.

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YOU CAN STAPLE ALL YOUR J-K WIRE AND CABLE UP TO 16 STRANDS.

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SAVE OVER 50% IN MATERIAL AND LABOR.

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STAPLES PER PKG.—5,000

SIZE	8 per pkg.	15 per pkg.	30 per pkg.
L3B 5/16"	2.75	2.50	2.25
L3M 7/16"	2.90	2.75	2.50
L3D 9/16"	3.10	2.95	2.75

Sizes may be assorted for quantity price. Further Discounts in Quantity Orders.

Also rust-proof and carbon steel available.

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STATEMENT OF OWNERSHIP

Statement required by the Act of Congress of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233), showing the ownership, management and circulation of TELEPHONY, published weekly at Chicago, Ill., for October 1, 1955.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Telephony Publishing Corp., 608 S. Dearborn St., Chicago 5, Ill.; editor, Ralph C. Reno, 608 S. Dearborn St., Chicago 5, Ill.; managing editor, Dan S. Fargo, 608 S. Dearborn St., Chicago 5, Ill., and business manager, H. D. Fargo, Jr., 608 S. Dearborn St., Chicago 5, Ill.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as those of each individual member, must be given.)

Telephony Publishing Corp., 608 S. Dearborn St., Chicago 5, Ill.; H. D. Fargo, 608 S. Dearborn St., Chicago 5, Ill.; H. D. Fargo, Jr., 608 S. Dearborn St., Chicago 5, Ill.; Ralph C. Reno, 608 S. Dearborn St., Chicago 5, Ill.; A. J. Stults, 608 S. Dearborn St., Chicago 5, Ill., and Dan S. Fargo, 608 S. Dearborn St., Chicago 5, Ill.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: 9,903.

RALPH C. RENO.

Sworn to and subscribed before me this 26th day of September, 1955.

M. TERI SMITH.

(My commission expires December 10, 1958.)

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